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BALCONY

the JOURNAL
OF THE MEDICAL SOCIETY OF NEW JERSEY

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1967

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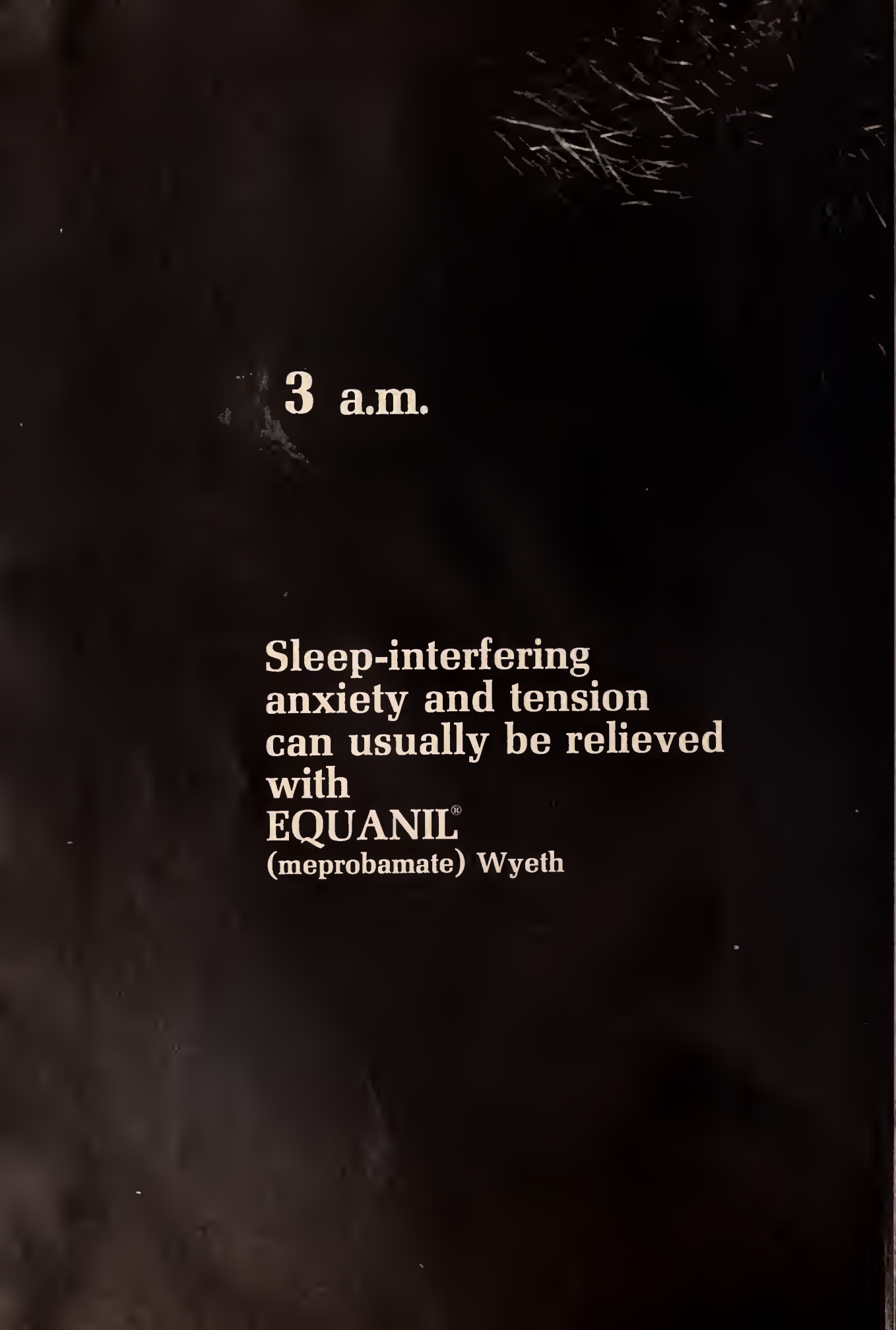
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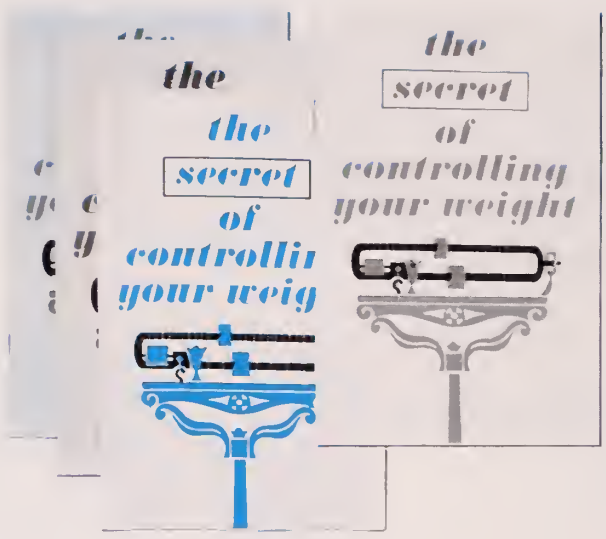
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S	M	T	W	T	F	S
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3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

S	M	T	W	T	F	S
1	2	3	4	5	6	7
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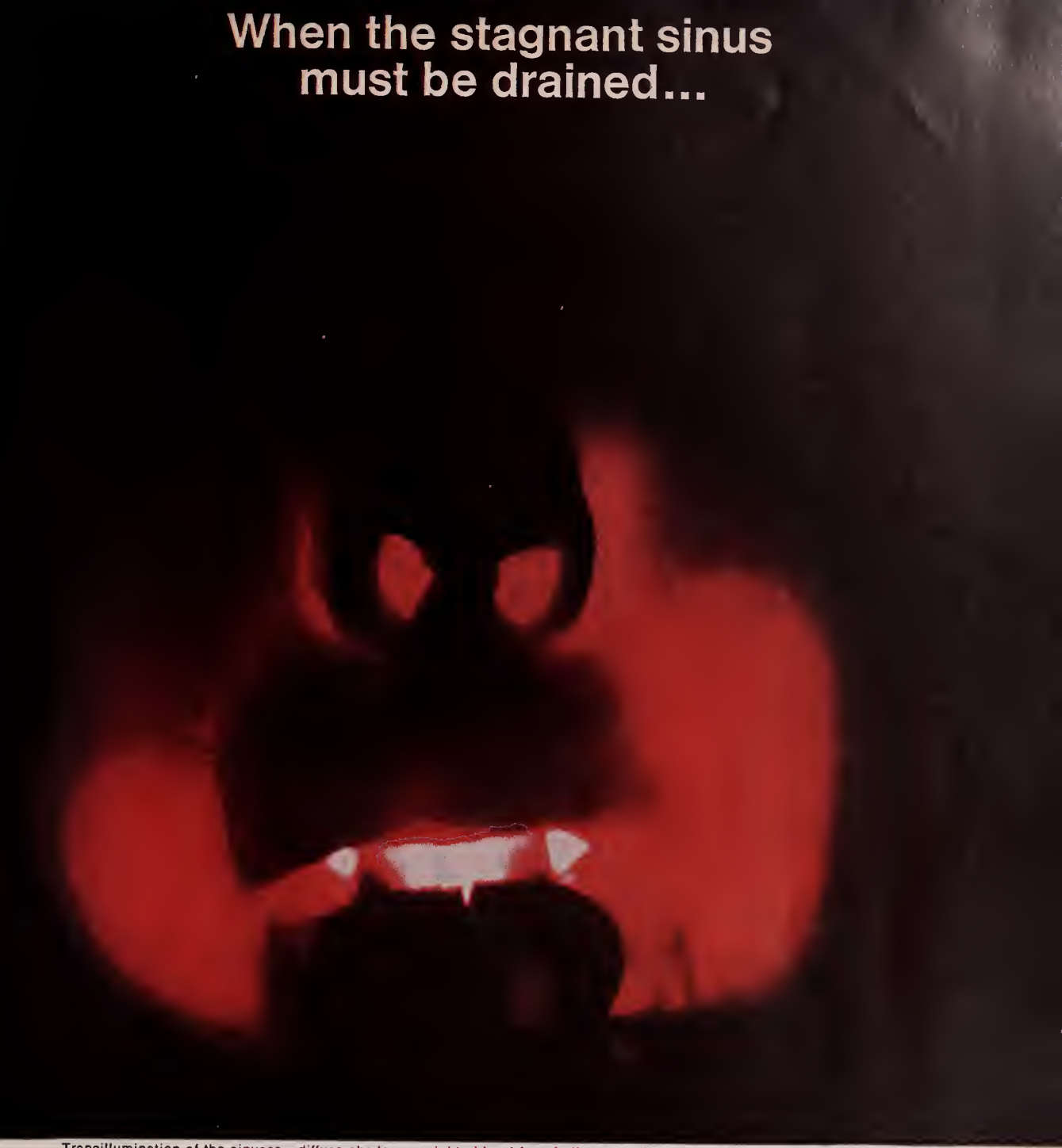
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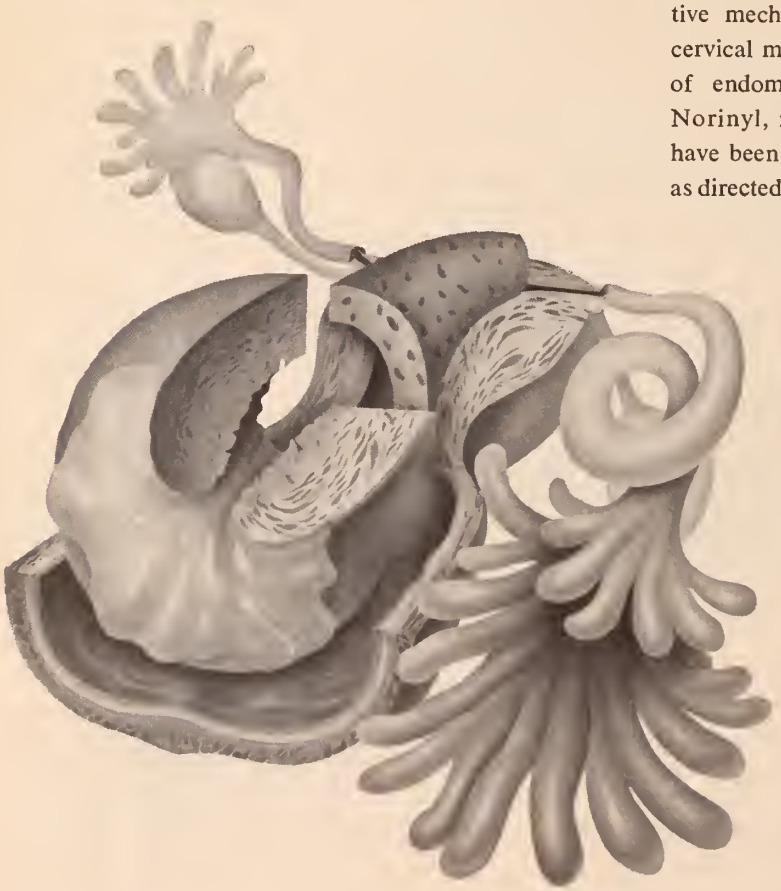
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Warning: Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn.

Precautions: By May 1963, experience with norethindrone 2 mg.—mestranol 0.1 mg. had extended over 24 months. Through miscalculation, omission or error in taking the recommended dosage of Norinyl, pregnancy may result. If regular menses fail to appear and treatment schedule has not been adhered to, or if patient misses two menstrual periods, possibility of pregnancy should be resolved before resuming Norinyl. If pregnancy is established, Norinyl should be discontinued during period of gestation since virilization of the female fetus has been reported with oral use of progestational agents or estrogen. When lactation is desired, withhold Norinyl until nursing needs are established. Existing uterine fibroids may increase in size. In metabolic or endocrine disorders, careful clinical preevaluation is indicated. A few patients without evidence of hyperthyroidism had elevated serum protein-bound iodine levels, which in the light of present knowledge, does not necessarily imply hyperthyroidism. Protein-bound iodine increased following estrogen administration. Bromsulphalein retention has occurred in up to 25% of patients without evidence of hepatic dysfunction. Studies from 24-hour urine collections have shown an increase in aldosterone and 17-ketosteroids and decrease in 17-hydroxycorticoid levels. Thus, Norinyl should be discontinued prior to and during thyroid, liver or adrenal function tests. Because progestational agents may cause fluid retention, conditions such as epilepsy, migraine and asthma require careful observation. Thus far no deleterious effect on pituitary, ovarian or adrenal function has been noted; however, long-range possible effect on these and other organs must await more prolonged observation. Norinyl should be used with caution in patients with bone, renal or any disease involving calcium or phosphorus metabolism.

Side Effects: Intermenstrual bleeding; amenorrhea; symptoms resembling early pregnancy, such as nausea, breast engorgement or enlargement, chloasma and minor degree of fluid retention (if these should occur and patient has not strictly adhered to medication plan, she should be tested for pregnancy); weight gain; subjective complaints such as headache, dizziness, nervousness, irritability; in a few patients libido was increased. In a total of 3,090 patients, 2.2% discontinued medication because of nausea.

NOTE: See sections on contraindications and precautions for possible side effects on other organ systems.

Dosage and Administration: One Norinyl tablet orally for 20 days, commencing on day 5 through and including day 24 of the menstrual cycle. (Day 1 is the first day of menstrual bleeding.)

Availability: Dispensers of 20 and 60 tablets; bottles of 100.

References: 1. Council on Drugs: JAMA 187:664 (Feb 29) 1964. 2. Bryans, F. E.: Canad Med Ass J 92:287 (Feb 6) 1965. 3. Goldzieher, J. W.: Med Clin N Amer 48:529 (Mar.) 1964. 4. Cohen, M. R.: Paper presented at Symposium on Low Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965. 5. Hammond, D. O.: Ibid. 6. Rice-Wray, E., Goldzieher, J. W., and Aranda-Rosell, A.: Fertil Steril 14:402 (Jul.-Aug.) 1963. 7. Goldzieher, J. W., Moses, L. E., and Elias, L. T.: JAMA 180:359 (May 5) 1962. 8. Kempers, R. D.: GP 29:88 (Jan.) 1964. 9. Tyler, E. T.: JAMA 187:562 (Feb. 22) 1964. 10. Rudel, H. W., Martinez-Manautou, J., and Maqueo-Topete, M.: Fertil Steril 16:158 (Mar.-Apr.) 1965. 11. Flowers, C. E., Jr.: N Carolina Med J 25:139 (Apr.) 1964. 12. Goldzieher, J. W.: Appl Ther 6:503 (June) 1964. 13. The Control of Fertility. Report adopted by the Committee on Human Reproduction of the American Medical Association: JAMA 194:462 (Oct. 25) 1965. 14. Flowers, C. E., Jr.: JAMA 188:1115 (June 29) 1964. 15. Merritt, R. I.: Appl Ther 6:427 (May) 1964. 16. Newland, D. O.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965.

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Nausea & vomiting	●		●
Neurological disorders	●		
Obstetrics	●	●	●
Pain	●	●	●
Pediatrics	●	●	●
Porphyria	●	●	
Psychiatric disorders	●		
Hiccups—refractory	●		
Senile agitation	●		
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The following is a brief precautionary statement. Before prescribing, the physician should be familiar with the complete prescribing information In SK&F literature or *PDR. Contraindications:* Comatose states or the presence of large amounts of C.N.S. depressants. *Precautions:* Potentiation of C.N.S. depressants may occur (reduce dosage of C.N.S. depressants when used concomitantly). Antiemetic effect may mask other conditions. Possibility of drowsiness should be borne in mind for patients who drive cars, etc. In pregnancy, use only when necessary to the welfare of the patient. *Side Effects:* Occasionally transitory drowsiness; dry mouth; nasal congestion; constipation; amenorrhea; mild fever; hypotensive effects, sometimes severe with I.M. administration; epinephrine effects may be reversed; dermatological reactions; parkinsonism-like symptoms on high dosage (in rare instances, may persist); weight gain; miosis; lactation and moderate breast engorgement (in females on high dosages); and less frequently cholestatic jaundice. Side effects occurring rarely include: mydriasis; agranulocytosis; skin pigmentation, lenticular and corneal deposits (after prolonged substantial dosages).

For a comprehensive presentation of 'Thorazine' prescribing information and side effects reported with phenothiazine derivatives, please refer to SK&F literature or *PDR.*

Smith Kline & French Laboratories SK&F

winter 1966

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this issue: the nose as a shock organ

the nose as a shock organ

by Charles J. Shagoury, M.D., Chelmsford, Massachusetts



"Is it a cold, hay fever, or has he been reprimanded by his boss?" Occasionally, you will ask yourself this question when confronted by a patient with abrupt onset of rhinorrhea, nasal obstruction, and sneezing. Usually the history will elucidate the problem, but examination of the nose will often provide valuable clues to the correct diagnosis.

The nose is a shock organ in a double sense. First, it is in the nose that the confrontation takes place with the surrounding atmosphere. For twenty-four hours a day, the nose must meet the varying challenges of the inspired air, containing perhaps noxious chemicals, dust, dirt, bacteria, viruses, fungi, and industrial pollutants of all kinds, and render it clean, virtually sterile, and fit for the sensitive alveoli of the lungs. Whatever the temperature or humidity of the atmosphere, the nose must transmit it to the lungs at approximately 98°F, and with a humidity of approximately 40%.[1]

Second, in particularly susceptible patients, the nose acts as a shock organ in a manner totally unrelated to its normal function. Persons with hay fever respond to ordinarily harmless materials by extreme nasal congestion, with marked rhinorrhea and violent spasms of sneezing. In some patients, exposure to threatening or disagreeable agents, or situations involving mental conflict may result in a reaction which is exclusively nasal, with swelling of the turbinates, and marked hypersecretion.[2]

Nasal symptoms usually result when the nose seeks to perform its function of getting rid of noxious and dangerous elements in the atmosphere, and prevent their admission to the trachea and lungs. Small particles are removed by the mucous coating which blankets the nasal passages. This mucous blanket contains a bacteriostatic agent, lysozyme, which destroys most air-borne bacteria.[3] The mucinous content renders the surface sticky, causing dusts and small particles to adhere. It has been postulated that this process is rendered more effective through adsorption because of a surface electrical charge on the nasal mucosa.[4] The cilia then sweep the particulate matter to the pharynx. The nose can prevent entrance into the lungs of particles as small as three microns in diameter, but smaller particles elude the nasal barrier. Most bacteria causing respiratory infections are one to three microns in diameter, but since they usually are inhaled in clumps, they are efficiently removed as a rule. Viruses, which are of the order of 1/1000 of this size, are less efficiently dealt with, unless they occur in very large aggregates.[5]

The nose will react in a more or less similar manner, whatever the nature of the offending agent, whether it be an irritant chemical, virus, pollen, or distasteful emotional situation. In acute coryza, the most characteristic sign is a profuse watery discharge. The volume of secretion may rise from practically nothing to nearly 60cc in twenty-four hours.[6] The mucous membrane is reddened and engorged, while the turbinates are markedly swollen. After the first day or two, the secretion becomes thicker, yellowish, and more difficult to expel. The surface cells are largely destroyed, contributing to the copious discharge, which now also contains numerous inflammatory cells which have migrated to the area. Gradually, over a period of a few days, or a week, the flood abates, the swelling and redness subside, and the nasal epithelium resumes a healthy appearance.

Repeated attacks of rhinitis, particularly if there is an underlying element of obstruction, may result in chronic rhinitis. The mucous membrane is constantly swollen and reddened. Sticky, mucopurulent secretions are a continuous feature, and the glandular elements are hypertrophied. Commonly, the mucosal surface takes on an irregular, rounded "mulberry" appearance, and nasal passages are occluded by the swollen turbinates and redundant mucosa.

While all of us are susceptible to colds, the victim of hay fever, or allergic rhinitis, displays a marked nasal reaction to materials in the air which leave his associates unaffected. In such a patient, the nasal mucosa has become an allergic "shock" organ. Contact with the nasal allergen causes local release of histamine, with vasodilatation, increased vascular permeability, and severe nasal congestion, similar to the "wheal" and "flare" reactions in the skin, when the epidermis is the allergic shock organ. While we eagerly await the coming of spring, the hay fever sufferer dreads the blooming season, whose invisible pollens are poisons to his sensitive nose. His neighbor's cat or dog may provoke paroxysms of uncontrollable sneezing. In some cases a specific allergen is not identified, but the triad of rhinorrhea, nasal obstruction, and sneezing is present.[7] The nose in these cases shows a pale, boggy, edematous mucosa, with a thin mucoid secretion. The mucous membrane shows extreme retractility to 1% cocaine or ephedrine. If the patient has medicated himself prior to examination, the nasal passages may appear abnormally patent, or show exaggerated congestion due to rebound reaction. The secretion may show a large number of eosinophils particularly after an attack of sneezing or rhinorrhea. Touching the mucosal surface, especially of the inferior turbinate, leaves an indentation, showing that the swelling is due to stasis and edema, rather than actual hyperplasia of the mucous membrane as in chronic hypertrophic rhinitis. Though the pale swollen mucosa is the hallmark of allergic rhinitis, as usually seen by the physician, exposure of allergic subjects to their known allergens results in a brief hyperemic phase, followed by pallor and edema.[8]

In the later stages of allergic rhinitis, the chronic edema of the mucous membrane results in the formation of polyps, clusters of grape-like masses hanging from the roof of the nose, with a pale glistening surface, contributing significantly to the sense of nasal obstruction and oppression.

A large group of patients show symptoms of nasal congestion when confronted by adverse life situations.[9] In these unfortunate persons, anxiety, frustration, and resentment are often accompanied by a runny nose and nasal obstruction. Lacrimation adds to the nasal stuffiness. This autonomic response, mediated by the parasympathetic nervous system, may be part of a general parasympathetic reaction, or may possibly represent in part, a symbolic effort to wash out and crowd out the offending situation.

Nasal congestion may also occur in some patients at times of sexual stimulation, and in women during menstruation and pregnancy, even to the point of epistaxis.[10] The relationship is obscure; castration results in atrophy of the nasal glands, and their action is inhibited by the hormones of the hypophysis and the thyroid.[11] The nose may be the shock organ in drug therapy. The nose may also bear the brunt of industrial stress, in those who work in a hot dry atmosphere, or those exposed to acid fumes, or irritating dusts. As the air in our cities is increasingly polluted by exhaust fumes, and industrial irritants, whole urban populations may suffer from chronic nasal and respiratory symptoms.

Of course, nasal reactions are not just infectious, or allergic, or emotional. Particularly in the chronic sufferers, there is an interdependence of all three. Death of a relative, or other psychic shock can pre-

(concluded on following page)

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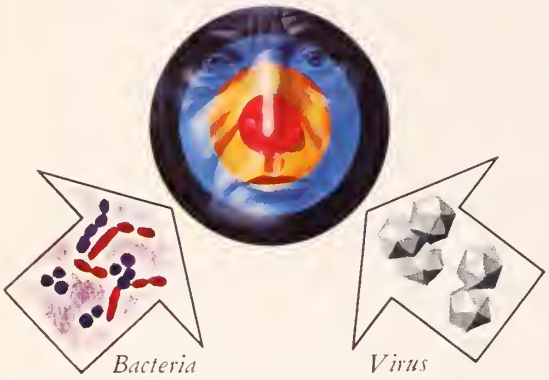
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cipitate an attack of rhinorrhea in hay fever sufferers.[12] Others develop attacks of vasomotor rhinitis following change in temperature, chilling, or exposure to the sun, or simply warm bedclothes.

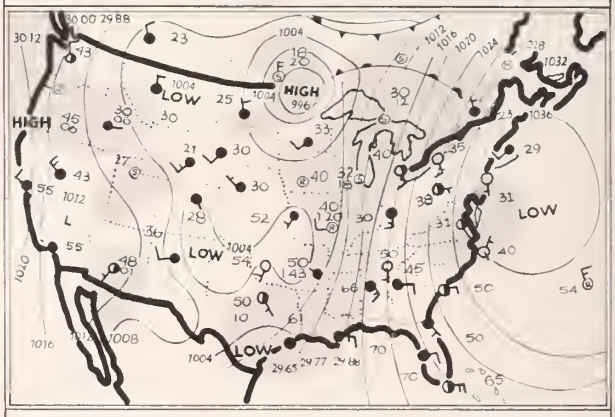


The complex interplay of allergy and infection is largely unclear. Allergy to the viruses and bacteria which cause infection has been postulated, but is difficult to demonstrate. The swollen obstructed allergic nose is more susceptible to infection. At the same time, infection often precedes or precipitates an allergic attack. Exposure of a susceptible patient to an allergen can activate latent virus organisms leading to infection.[13] This "jolt" reaction represents a summation of an allergen and a virus leading to symptoms in the nose as a shock organ, which neither could have produced alone. In childhood, repeated attacks of bronchitis and colds may be inflammatory reactions to an allergen, or precipitated by exposure to an allergen. These children may later develop typical allergic rhinitis. On the other hand, children with typical allergic histories, eczema, asthma, and allergic familial backgrounds, may later develop typical infectious rhinopathies. Skin tests in such patients are usually positive.

Nasal reactions are part of the systemic response of the patient to an unwelcome stimulus. In cases of respiratory infection and exposure to atmospheric irritants, the reactions are useful, and to some extent desirable. They are usually self-limited, disappearing within a few days, or upon removal of the provoking agent. Here the distressing symptoms can be ameliorated with appropriate decongestant agents, or, in the case of severe or complicated respiratory infections, antibiotics may be given, with reasonable confidence of a cure. On the other hand, when nasal reactions are the peculiar response of an individual to an allergen, or to an undesirable situation, they serve no useful purpose. The nose here is a shock organ in a stressful situation, but can furnish no response of value. It merely causes the patient symptoms which add to his problems. In these cases, symptomatic treatment is of great benefit, but often the underlying faulty pattern of response cannot be altered. Such a patient may literally be considered to be paying his way in life "through the nose."

References 1. Maures, E. R., Mendez, F. C., Jr., and Hilsinger, R. C.: Importance of the Nose in Filtering and Humidifying Inspired Air. Ohio State Med. J. 61:41-42. 2. Holmes, T.,Goodell H., Wolf, S., and Wolff, H. G.: The Nose. Springfield, Ill. 1950 Charles C. Thomas p. 10 ff. 3. Boies, L. H. R.: Fundamentals of Otolaryngology. Phila. W. B. Saunders Co. 1954 p. 160. 4. Proetz, A. W.: Applied Physiology of the Nose. St. Louis 1941 Zimmerman-Petty Co. p. 6. 5. Spikard, A.: The Common Cold, A Survey. Disease of the Chest 48:545-49. Nov. 1965. 6. Ibid. 7. Bourdial, J.:Role of Allergy in Upper Respiratory Tract Infection. Europa Med. Paris 4:75-80 1965. 8. Holmes, et al. The Nose p. 22. 9. Ibid. p. 320. 10. Proetz, A. W. op. cit. p. 321. 11. Ibid. p. 320. 12. Rees, Linford J.: Physiogenic and Psychogenic Factors in Vasomotor Rhinitis. J. Psychosomatic Research 8:101 Sept. 1964. 13. Horesh, A. J.: Allergy and Infection. An Allergy 23:621-35 Dec. 1965.

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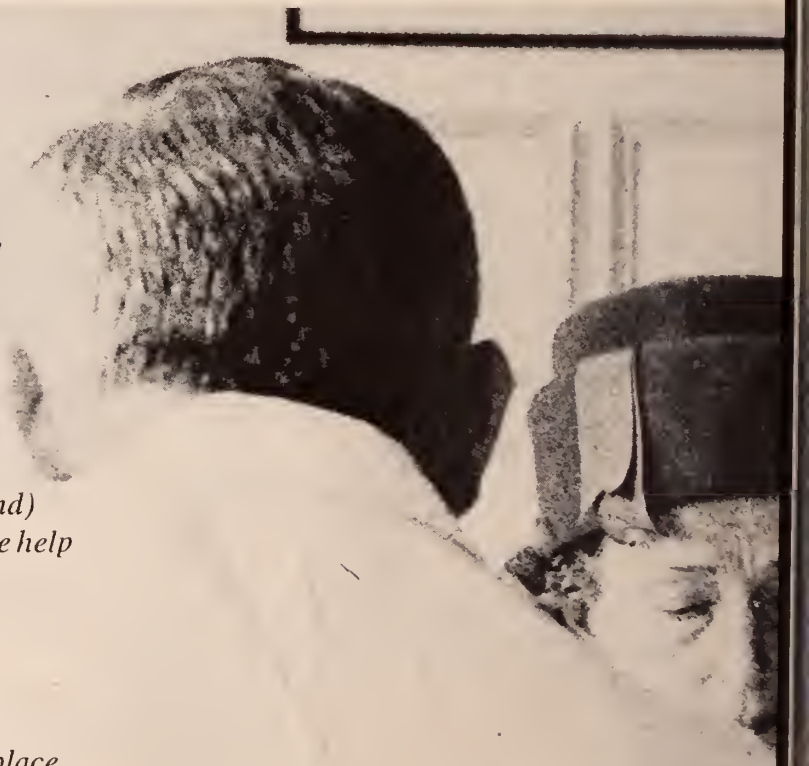
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rences: (1) Siver, R. H.: CMD, *21*:109, September
. (2) Frykman, H. H.: Minn. Med., *38*:19-27,
ary 1955. (3) McGivney, J.: Tex. State Jour. Med.,
6-18, January 1955. (4) Quehl, T. M.: Jour. of
da Acad. Gen. Prac., *15*:15-16, October 1965. (5)
kes, D. J.: N.Y. State Jour. Med., *58*:2672-2673, August 1958. (6) Weekes, D. J.: EENT Digest, *25*:47-59, December 1963. (7) Abbott, P. L.: Jour. Oral Surg., Anes., & Hosp. Dental Serv., 310-312, July 1961. (8) Rapoport, L. and Levine, W. I.: Oral Surg., Oral Med. & Oral Path., *20*:591-593, November 1965.

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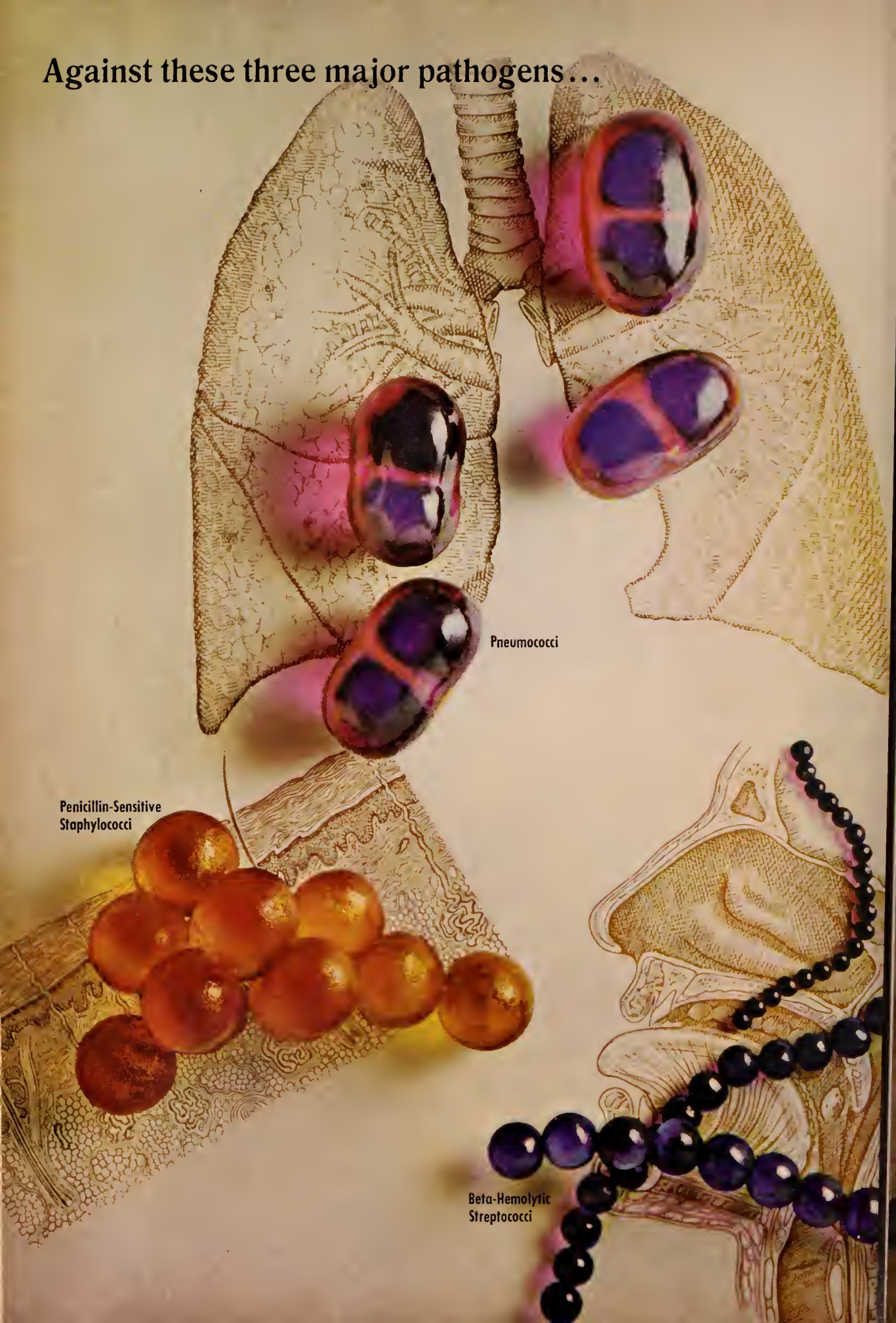
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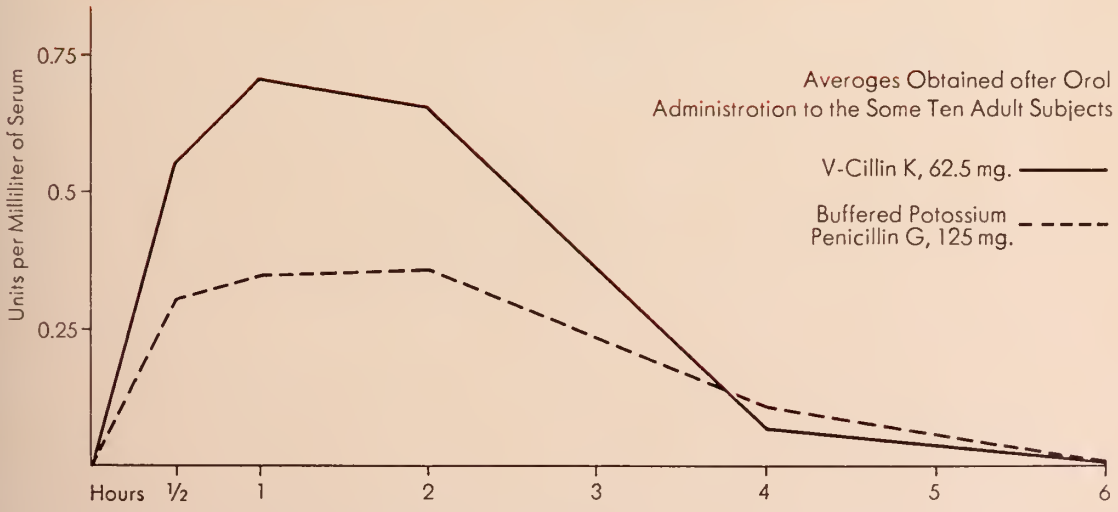
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Penicillin G	0.02	0.005-1.6	0.005	0.002-0.2	0.02	0.01-0.1
Methicillin	1.6	0.4-6.3	0.2	0.1-0.4	0.2	0.1-1.6
Oxacillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Cloxacillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

Adapted from Klein, J. O., and Finland, M.: New England J. Med.,269 1019, 1963.

with high blood levels, even in the presence of food



Adapted from Griffith, R. S., and Black, H. R.: Current Ther. Res., 6 253, 1964.

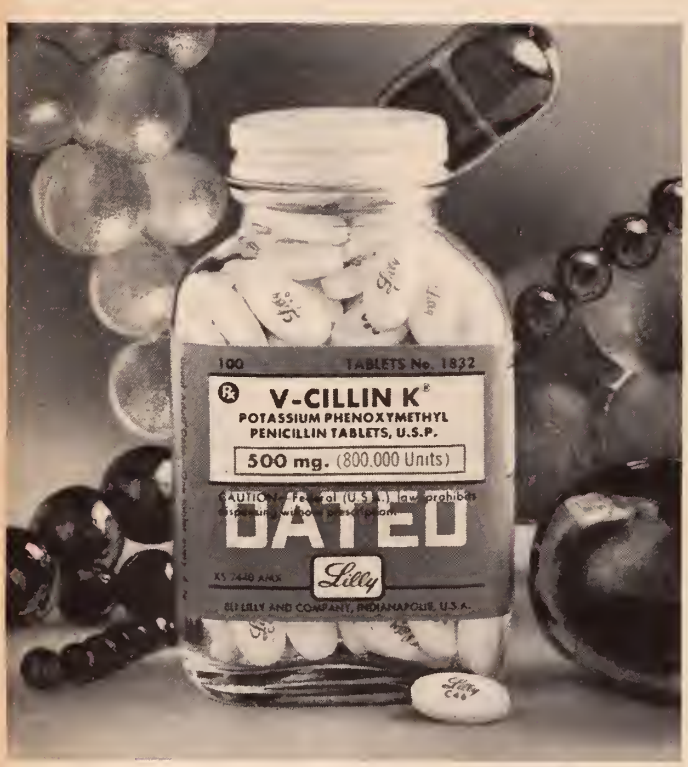
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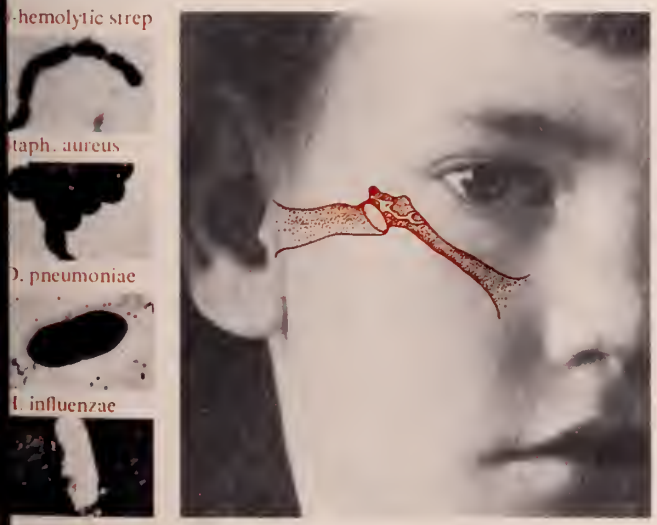

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Contraindicated in sulfonamide-sensitive patients, pregnant females at term, premature infants or infants during first 3 months of life.

Warnings: Use only after critical appraisal in patients with liver damage, renal damage, urinary obstruction or blood dyscrasias. If toxic or hypersensitivity reactions or blood dyscrasias occur, discontinue therapy. In intermittent or prolonged therapy, blood counts and liver and kidney function tests should be performed. Data insufficient on prolonged or recurrent therapy in chronic renal diseases of children.

Precautions: Observe usual sulfonamide therapy precautions, including maintenance of an adequate fluid intake. Use with caution in patients with histories of allergies and/or asthma. Patients with impaired renal function should be followed closely since renal impairment may cause excessive drug accumulation. Occasional failures may occur due to resistant microorganisms. Not effective in virus or rickettsial infections.

Adverse Reactions: Following may occur: headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, Stevens-Johnson syndrome, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

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References: 1. Braden, B.; Colmore, J. P., and Cummings, M. M.: Antimicrobial Agents Annual—1960, p. 54. 2. Alban, J.: *Am. J. Dis. Child., 109*:304, 1965. 3. Elia, J. C.: *Eye Ear Nose & Throat Month., 41*:722, 1962. 4. Carter, C. H.: *Clin. Med., 71*:1571, 1964. 5. Jackson, H.; Cooper, J.; Mellinger, W. J., and Olsen, A. R.: *Southwestern Med., 44*:246, 1963. 6. Reichelderfer, T. E.: *Clin. Med., 71*:1045, 1964. 7. Peters, J. H.: Scientific Exhibit presented at the Spring Meeting of the American Academy of Pediatrics, April 26-29, 1965. 8. Peters, J. H.: Antimicrobial Agents and Chemotherapy—1961, p. 406. 9. Braden, B., and Colmore, J. P.: *J. Oklahoma M. A., 57*:7, 1964. 10. Chastain, P. J.: *J. Florida M. A., 48*:816, 1962. 11. Grater, W. C.: *Antibiotics & Chemother., 12*:450, 1962. 12. Exline, A. L.: *Colorado GP, 5*:(5), 11, 1963. 13. Patton, J. M.: *West. Med., 5*:46, 1964.

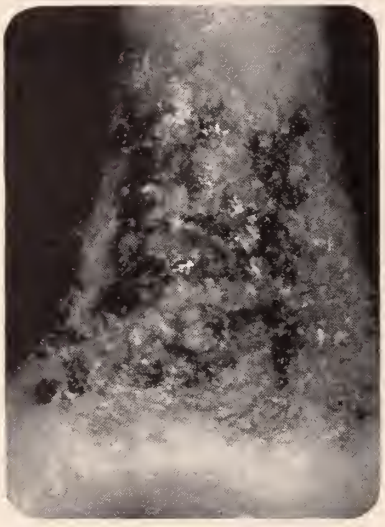
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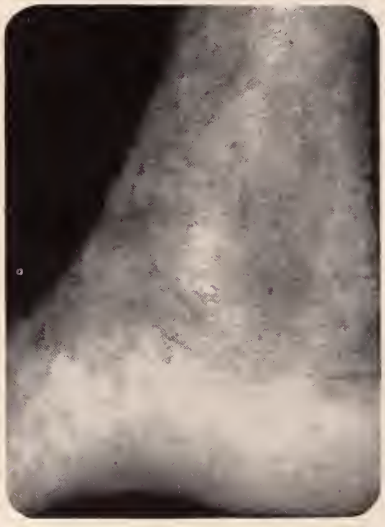
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EDITORIALS

A GP By Any Other Name—

Three different committees have just concluded (what most of us have long known) that some provision simply must be made for the continued production of medical practitioners with an overall view of patients and an overall interest in them. The three studies were those conducted by the AMA's *ad hoc* Committee on Education for Family Practice, the National Commission on Community Health Services, and the Citizens' Commission on Graduate Medical Education.

The National Commission on Community Health Services is a private non-profit study group headed by Marion B. Folsom. They propose that all health care services be oriented on a community basis; that every person select a *personal physician* who would be responsible for his patient's preventive health service and continuing care; and finally, that ways be found to change existing educational patterns to stress the training of this *personal physician.*

The Citizens' Commission on Graduate Medical Education, though established by the AMA Board of Trustees, is not made up primarily of doctors of medicine. It was chaired by John S. Millis, Ph.D. Their report is being compared to the famed Flexner report which, a half century ago, changed the face of medical education. This comprehensive report indicates why general practice, as now constituted, is on the decline and suggests how this can be corrected. They chose the name *primary physician* to designate the practitioner of comprehensive care. His position is compared to the quarterback who uses the talents of the other members of the team; or to the president of a company who delegates certain decisions to narrowed specialists. They recommend the level of training to be on a par with that of other specialties and suggest that the student who will be attracted to this endeavor would probably be more a humanist than a "pure" scientist.

The *ad hoc* Committee on Education for Family Practice of the American Medical Association assures us that: "The American public needs and wants a large number of well-qualified *family physicians* to provide comprehensive personal health care." The family doctor would:

Serve as the physician of *"first contact"* and provide the channel of entry into the health care system.

Evaluate the patient's total health needs, provide personal medical care within one or more fields of medicine, and refer the patient, when indicated, to specialized resources, without losing continuity of care.

Assure responsibility for the patient's comprehensive and continuous health care, acting as leader or coordinator of the teams that provide health services.

Accept responsibility for the patient's total health care within the context of his environment, including the community and the family, or comparable social unit. The Committee placed strong emphasis on the behavioral and social sciences and humanities, saying such studies are "of great importance in the educational background" of the family practitioner of the future.

The American Academy of General Practice, long recognizing the need for restoring the prestige of the family M.D. and for recognizing the GP's unique role, will make a preliminary application for the establishment of a Board of Family Practice. Before this can be accomplished, however, a definition of "family medicine" had to be developed. What general practice implies in rural non-industrial areas may be entirely different from what it means in urban centers. A "Core Content of Family Medicine" has been assembled, which

sets the goal and the limits of the future family physician. The American Academy of General Practice is the only medical organization in which continued education is a requirement for continuing membership. It is likely, if the Board of Family Practice is established, that it will require continuing education and recertification.

So it seems that what has been an unofficial opinion for some time with much gnashing of teeth and outpouring of crocodile tears now has been officially recognized. Perhaps ways will be found to attract and produce this future friend of the family. Meanwhile—back on the farm of today's realities—who comes the closest to being this proposed paragon of medicine? It's the old general practitioner of today, struggling to care for the multitude, as he always has, while trying to keep up to date and informed on the new practical discoveries.

As for the name—perhaps that is not important. The National Commission opts for *personal physician,* while the Citizens' Commission suggests *primary physician.* This has the dual implication of "primary" as the point of first contact and "prime" as the leader in the sense of "prime minister." Other suggestions have been environmental physician, generalist, and coordinating physician. Whatever you call him, Ave GP!

Victor H. Boogdanian, M.D.
Chairman, GP Section

The Gross Exaggerations Of Martin Gross

A few months ago, our profession became the target of an extraordinary caricature, called simply *The Doctors.** Written with the vocabulary of a common scold, it charges us with incompetence, arrogance, greed, smugness, laziness, and mediocrity of intellect. Some of what he says is true. Indeed, most of what he says comes from medical journals or physician-writers. This last phenomenon would seem to neutralize Mr. Gross's major grievance. He says that we are self-satisfied and intolerant of criticism. Yet, nearly all of the needles in his quiver come from physicians and are quoted from medical periodicals. Obviously we do welcome criticism, and whatever other sins we may be guilty of, self-satisfaction is not one of them.

An examination of Mr. Gross's technic for collecting odium is an interesting lesson in the strategy of polemics. His most effective ploy is the "damned if you do, damned if you don't" approach. Thus, he suggests that an adequate history and physical examination should take an hour, and he scolds doctors who do this in less time. But elsewhere, he objects to doctors who keep patients waiting. Obviously, he can't have it both ways. He condemns the widespread use of antibiotics in pneumonia (Mr. Gross prefers vaccines), but a few pages later he condemns the failure to use antibiotics "to ward off cripping heart disease." He wants to see physicians more "preventive-medicine-minded," but he pokes fun at pediatricians whose practice includes much "well-baby care." Our hospitality to self-criticism has made this big book possible, but he charges us with suppressing impalatable truths about ourselves. He believes that the "doctor's discovery of non-existent disease is increasingly common'" and warns us not to assume that "every pain in the chest is heart disease." On the other hand, he is equally admonitory in telling us not to be too ready with the psychosomatic label. And so it goes. No matter what we do, Mr. Gross doesn't like us.

Another contrivance is to extrapolate figures from the special to the general. Thus, Mr. Gross suggests that 1½ million Americans last year were made sick enough to be hospitalized by reason of iatrogenic illness. This is based on figures cited by Barr at Cornell to the effect that 5 per cent of the admissions to that medical center were due to drug-induced illness. By extending this to *all* hospital admissions in the country, he generates the incredible figure of 1,400,000 such admissions.

* This book is reviewed on page 45 of this issue.

Of course, admissions to university-centered hospitals are not typical and cannot be used as a basis for statistics to be extrapolated. The more bizarre, the more difficult to diagnose, and the more research-valuable cases go there. When he moves from New York to New Haven and projects from Yale figures, he revises his statistics and concludes that "doctor-caused disease is created in over 5 million hospital patients annually. . . . It kills or contributes to the death of 100,000 Americans in hospitals alone each year."

Mr. Gross cannot understand the necessity for the calculated risk. Many of the drug-induced illnesses were mild reactions to life-saving drugs. Someone should tell the author that the alternative to giving the drug was not a healthy patient but a dead one.

He disapproves of many x-rays. ("Diagnostic x-rays," he says, "probably account for 8 per cent of all cases of leukemia.") Tonsillectomy is branded as a "killer." Indeed, he advises us that "children do not die of tonsillitis, but they can—and do—perish from the physician's tonsillectomy." (Inserting that word "physician" in front of tonsillectomy is another ingenious artifice.) He sometimes takes modest figures and escalates them with a "probably" or "estimated." For instance, he writes: "Deaths from penicillin anaphylaxis have been estimated at a hundred a year, but others fix it closer to a thousand." Another way of throwing mud is to include things that might happen: "The image of a physician enslaved by narcotics . . . is an unsettling one. Too often it is an accurate portrait, for approximately 2,000 doctors now practicing are, or *will become,* narcotic addicts." (Italics mine. -HAD)

As for the town-gown controversy, Mr. Gross impartially plagues both the houses. The academicians are too academic, he feels, putting research and teaching interests above patient-care; and the practitioner on the firing line is not academic enough—he's the "intellectually mediocre" one. Again, the "can't win" technic.

Most medical periodicals have treated this rather malevolent opus with silence, intended to suggest that the charges are not worthy of being answered. But two things must be said. Some of the charges *are* true—indeed; are supported by respected colleagues and scrupulous surveys. And our silence will not be seen as evidence of dignity, but rather as evidence that the charges are unanswerable.

Something else must be said. If readers believe what is written here, they will be afraid to go to doctors. For instances, at one point Mr. Gross combines a statement by Rosen and Anderson with another by Mariyama and concludes that if current medical knowledge were properly applied, "there would have been 297,000 fewer deaths in the USA in 1960." How does a percipient citizen react to this? He will hesitate to seek medical care; instead, he will allow pain and disability to continue, or he will go to cultists, or he will try home treatment. It's hard to see how this will improve the health of the people, and hard to see what else a person can do, if he were deeply impressed by this work.

Perhaps the very intemperateness of this book will impair its effectiveness. Perhaps readers will grow weary of page after page of anecdotes, of the citation of bizarre results, of a melange of testimonials in reverse.

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ORIGINAL ARTICLES

Radioisotopes make possible simple, convenient, and informative tests for a variety of internal disorders.

Radioisotopes In The Practice Of Medicine*

Stanley M. Becker, M.D.
Hugo C. Pribor, M.D., Ph.D.
Perth Amboy

Nuclear medicine is one of the newest of the medical specialties. The artificial production of radioisotopes began in 1933 and was first utilized by physicians in 1939, when 32-phosphorus, 131-iodine, and 59-iron were used both for treatment and diagnosis. In 1946, the Atomic Energy Commission made radioisotopes available to several research institutions. By 1956, more than 8,000 medical institutions were authorized to obtain them.[1]

Radioisotope Tests of Thyroid Functions

1. The radioactive iodine uptake (R.A.I.) is one of the most frequently used tests of thyroid function. 125-iodine or 131-iodine in liquid or capsule form is ingested by the patient. The same concentration of the radioisotope is employed as a 100 per cent standard, in a plastic structure which simulates the density of the human neck. The container is called the "neck phantom." The thyroid gland concentrates this radioactive iodine, and the rate of concentration can be determined with a scintillation detector. If a detector with a large sodium iodide crystal is used, the test can be done with very small doses of radioactive iodine, such as one microcurie or less. With smaller crystals, slightly larger doses are necessary.

The time following the tracer dose at which the uptake of the thyroid gland is measured varies from two to twenty-four hours. If only a twenty-four hour uptake is done, some cases of hyperthyroidism will be missed.[2] A two-hour and twenty-four hour uptake are therefore preferable. Normal values for the two-hour uptake are 6 to 12 per cent and for the twenty-four hour uptake, 15 to 45 per cent.

Results below the normal range suggest hypothyroidism, while those above the normal range suggest hyperthyroidism. The R.A.I. represents a proportion of the *total* iodide pool of the body. Thus, any factors which increase the pool, such as ingestion of exogenous iodine, will decrease the R.A.I.; and if the pool is less than normal, the R.A.I. will be falsely elevated. Therefore, a careful history of previous medication (not only of iodine-containing drugs, but many non-iodine-containing drugs which also affect the uptake) must be taken. A list of the more common medications affecting the R.A.I. and the duration of this effect is found in Table I.

The results of any thyroid function test must be evaluated in the light of the clinical status of the patient. For this reason, a careful history of any symptoms of hypo- or hyperthyroidism is taken and then a brief clinical examination of each patient is performed. When the results of the R.A.I. are not compatible with the clinical impression, two modifications of this test may be done. The first of these is the Triiodothyronine (T-3 or Cytomel®) inhibition test. The patient is given 50 micrograms of Cytomel® each day for a minimum of four days. On the fifth day, the residual radioactive iodine in the patient's

* This work from the Department of Laboratories of Perth Amboy General Hospital is one of a series of articles especially prepared for this JOURNAL by members of the New Jersey Society of Pathologists.

TABLE I

Medications Causing Decreased Thyroid Uptake of 131-Iodine

	Duration		*Duration*
Inorganic iodides (over 1 mgm.)		thyroid extract	1-2 months
Lugol's KI	7-30 days	triiodothyronine	30 days
iodide antitussives	7-30 days	anti-thyroid drugs	8 days
Organic iodides		antihistamines	8 days
Enterovioform	6-9 months	ACTH	8 days
Diodoquin	30 days	adrenal steroids	8 days
Floraquin		Banthine	8 days
Topical iodides		sulfonamides	7 days
iodine tincture	14 days	Orinase	7 days
Vioform	6-9 months	Pentothal	7 days
Iodoform	3 months	Butazolidin	14 days
X-Ray contrast media		PAS	14 days
Pyelography	15-30 days	sodium salicylate	
Cholecystography	1-3 months	resorcinol ointment	
Bronchography		phenothiazine	
Lipiodol	2-10 years	Pathilon	
Hytrast	30 days	vitamin A	
Myelography	2-10 years	progesterone	

thyroid gland is counted and then the R.A.I. is repeated. In pseudohyperthyroidism, the result of the second uptake will be less than half of the first. The second modification consists of the thyroid stimulating hormone (TSH) test. This test consists of the administration of bovine thyrotropin (Thyrotropar), 10 units intramuscularly. After counting the residual activity of the thyroid gland, the R.A.I. is repeated. If the second uptake is much greater than the first—twice as much or more than 15 per cent higher—it indicates that the patient has secondary hypothyroidism, while if there is little or no increase in the uptake, it suggests primary hypothyroidism.

2. The Triiodothyronine (T-3 test) involves the use of radioactive iodinated labelled triiodothyronine, and its uptake by red blood cells or a resin in the form of a powder or sponge. Its main advantages over the R.A.I. are that no radioactive material is administered to the patient and that it is affected by very few medications or iodine-containing substances. Serum proteins compete with the sponge for the radioactive material. In hyperthyroidism, a greater amount of normal Triiodothyronine is secreted by the thyroid gland, and this results in a greater uptake of the labelled Triiodothyronine by the sponge. The reverse is true in hypothyroidism. A list of the conditions and medications which affects the T-3 test is found in Table II.

TABLE II

Factors Increasing Resin-Sponge or Red Cell Uptake

A. Hyperthyroidism (Grave's disease, thyrotoxicosis)

B. Certain medications
- Heparin
- Dicumarol
- Salicylates (even a single large dose in a euthyroid patient)
- Prednisone
- Butazolidin
- Diphenylhydantoin
- Penicillin (large doses)

C. Certain diseases or disorders
- Severe nephrosis
- Supraventricular tachycardia (atrial arrhythmia, atrial fibrillation)
- Liver disease including hepatitis
- Metastatic malignancy
- Severe pulmonary insufficiency with carbon dioxide retention
- Polycythemia vera
- Chronic pyelonephritis with uremia
- Threatened abortion

D. Infancy (from premature or full-term birth to six or nine weeks of age)

Factors Decreasing Resin-Sponge or Red Cell Uptake

A. Hypothyroidism (myxedema)

B. Certain medications
- Prophylthiouracil in hyperthroidism
- Iodine in amounts sufficient to suppress secretion of thyroid hormone
- Estrogens
- Estrogen with cortisone

C. Uncomplicated pregnancy

D. Menstruation

E. Liver disease including hepatitis

3. Other less commonly performed radioisotope tests of thyroid function include the protein bound 131-I concentration, forty-eight hours and seventy-two hours following an oral dose, the conversion ratio (protein bound

131-I divided by the total plasma 131-I), the salivary/plasma ratios, and the thyroid clearance of radioactive iodine.

Blood Volume Studies

Blood volume determinations may be done by using iodine labelled human albumin, 51-chromium labelled red blood cells, or a combination of these two methods. The labelled albumin actually measures plasma volume. However, if you calculate the corrected or body hematocrit from the peripheral hematocrit, the total blood volume and the red cell volume can be calculated. The chromium procedure measures red cell volume, but in a similar way using the corrected hematocrit, the total blood volume and the plasma volume may be determined.

The radioactive material is injected intravenously and ten minutes later, after adequate mixing, an anticoagulated blood specimen is removed from either a different extremity or at least from a different vein. Extreme care must be taken to completely inject all of the material intravenously. If any of the radioactive material extravasates, the results of the blood volume will be falsely elevated. Serial blood volumes may be performed on the same patient as long as a pre-injection specimen is drawn. A commercial standard may be used or one of the syringes is diluted and a portion of the diluted specimen is used as a standard.

If the patient is actively bleeding from any site, the results of the blood volume will be increased because radioactive material will be lost from the vascular space. Once the hemorrhage has stopped, however, the blood volume will give an accurate measure of the amount of decrease of the total blood volume, plasma volume, or red blood cell volume, so that any one of these components may be adequately replaced. In many cases peripheral hemoglobin and hematocrits do not accurately reflect changes which have occurred in the total and red blood cell volume. On the basis of results of this test, recommendations may be made for specific component replacement such as packed red cells, whole blood, or plasma.

Hematologic Tests

1. *The Schilling Test.* This is an excellent test for pernicious anemia, and involves the administration of a very small amount of 57- or 60-cobalt labelled vitamin B_{12} to the patient. It is unaffected by parenteral vitamin B_{12} therapy. The patient ingests a capsule containing 0.5 microcuries of 57-cobalt labelled vitamin B_{12}, and one hour later receives 1 milligram of non-labelled vitamin B_{12} subcutaneously as a "flushing" dose, so that all of the cobalt labelled vitamin B_{12} which is absorbed will be excreted in the urine. All of the urine is collected for a twenty-four hour period and counted in a well counter. A diluted standard is also counted and the per cent excretion is then determined with a normal range of 7 to 22 per cent. Less than 3 per cent excretion is diagnostic of pernicious anemia. Excretion in the 3 to 7 per cent range suggests the malabsorption syndrome. Failure of the patient to collect all of his or her urine will result in a falsely decreased excretion. If the excretion is low, the test may be repeated using a capsule of intrinsic factor. In pernicious anemia the excretion with intrinsic factor will be in the normal range. Chronic renal disease may also cause a decreased excretion.

2. *Iron Metabolism.* Clearance of 59-iron chloride or citrate from the blood may be performed following the intravenous injection of this material. The normal half time disappearance is ninety minutes. It is decreased in polycythemia vera, the leukemias, hemolytic anemia, pernicious anemia, the anemia of infection and malignancy, and iron deficiency. It is increased in aplastic anemia. The rate of incorporation of the iron into the red cells as the per cent of administered dose per liter of whole blood can also be calculated. Eighty-five per cent of the radioactive iron should be incorporated in the red blood cell hemoglobin within ten days. Results less than this figure indicate erythroid hypoplasia of the bone marrow.

External counting over the spleen can be used as a guide to therapy in some of the hemolytic anemias. Normally such counting

reaches a peak level within four hours and then decreases. In hemolytic anemias the number of counts may continue at a high rate or rise, indicating increased destruction of the red blood cells in the spleen. Such patients are usually improved by splenectomy.

3. *Red Blood Cell Survival Studies.* 51-Chromium in the form of sodium chromate can be used to label the patient's own red blood cells. The labelling is stopped by the addition of 100 milligrams of ascorbic acid. The blood is then reinjected into the patient. A sample taken after twenty-four hours is used as the 100 per cent specimen, and samples are then drawn two or three times a week for four to five weeks. The blood is counted in a well counter, and results are plotted on semilogarithmic graph paper with time in days as the abscissa and per cent of the 100 per cent counts as the ordinate. The normal half time survival is twenty-seven to thirty-six days. In hemolytic anemias, this time is decreased.

Absorption Tests

Iodine labelled triolein and oleic acid in capsule form or in a liquid emulsion carrier meal can be used in differentiating the malabsorption states from pancreatic insufficiency. The reliance on blood radioactivity levels alone can be misleading in certain cases since abnormally high values occur in latent hyperlipemic states, abnormally low values result from delayed gastric emptying, and normal values may be found in the presence of steatorrhea. More accurate results are obtained with chemical or isotopic measurements of fecal specimens.[7]

Placental Localization

The position of the placenta in the pregnant uterus can be determined by counting over the uterus following injection of radioactive iodinated serum albumin. The count over the precordium is taken as a 100 per cent count, and nine or twelve squares over the uterus are then counted. A count greater than the precordial count indicates the position of the placenta in that area. This is a highly accurate procedure. In posterior implantation of the placenta, no area will give a higher counting rate than the precordial area. The placenta may also be scanned following the injection of 99-mTc labelled serum albumin.[3] This test is of great value in the differential diagnosis of vaginal bleeding in the third trimester, and pinpoints the location of the placenta in a high percentage of patients with placenta praevia.

Radioisotopic Scanning

Radioisotopic scanning is based upon the principle that various radioisotopic compounds are handled by diseased tissue in a manner different from that of the surrounding normal tissue. Either the radioisotope concentrates in the diseased tissue or it fails to take up the isotope. These differences in concentration can be detected by a collimated scintillation crystal which moves at an adjustable speed over the organ to be scanned. The thyroid gland is scanned using 131-iodine or 125-iodine. The latter has been reported to give better delineation of "cold" nodules.[4] 197-mercury and 203-mercury labelled chlormerodrin, 131-iodine labelled serum albumin, 99-mTc in the form of pertechnetate, and 74-arsenic in the form of sodium arsenate may be used in scanning the brain. Pertechnetate and chlormerodrin are also used in scanning the kidney. 198-gold in the form of colloid and 131-I labelled Rose Bengal are used to scan the liver. Iodine labelled albumin macroaggregates can be used to scan the lung, and 75-selenium methionine is used to scan the parathyroid glands and the pancreas. Sodium chromate and 203-mercury labelled mercuri-2-hydroxypropane can be used in scanning the spleen. 47 calcium, 85- and 87m-strontium[5] and 68-gallium[6] can be used in scanning bones. 131-I Rose Bengal can also be used in time concentration studies of liver function as can 131-I labelled sodium iodohippurate in evaluating renal function.

Many other less common diagnostic tests utilizing radioisotopes can be performed, including cardiac output studies with iodine labelled albumin, sodium space using 24-sodium, 47-



Figure 1. Thyroid Scan. Large "Cold" Nodule, Left Lobe.

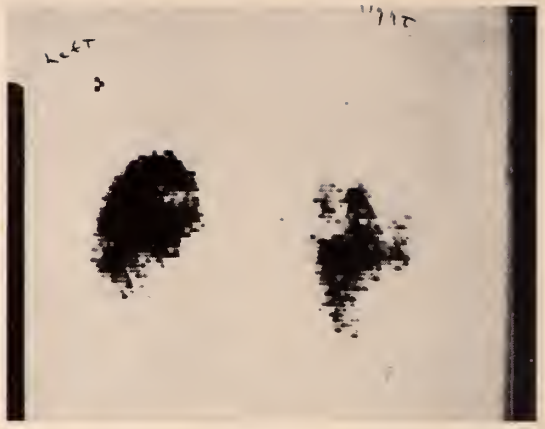


Figure 3. Kidney Scan. Multiple "Cold" Areas, Right Kidney, One "Cold" Area, Left Kidney.



Figure 2. Liver Scan. Large Metastatic Tumor Nodule, Right Lobe, Smaller Tumor Nodule, Left Lobe.



Figure 4. Brain Scan. "Hot" nodule.

calcium for studying calcium absorption, turnover, and excretion, and cobalt labelled vitamin B_{12} in studying renal clearance.

Figure 1 is a thyroid scan using 131-I in a 65-year old male with a large mass in the left side of his neck. The uptake in the right lobe is normal but there is greatly diminished uptake in the left lobe, i.e. a non-functioning or "cold" nodule. At surgery a large carcinoma was removed from the left lobe. Figure 2 shows a liver scan using 198-Au colloid in a 40-year old woman with an enlarged liver. An enormous defect is seen in the right lobe and a smaller area of absent uptake is present in the superior portion of the left lobe. Surgery confirmed the presence of two large metastatic tumor nodules in the right and left lobes of the liver. Figure 3 is a renal scan in the same patient as in Figure 2 and reveals multiple "cold" areas in the right kidney and one "cold" area in the lower pole of the left kidney. At post mortem examination, multiple tumor nodules were found in both kidneys. Figure 4 is a brain scan using 203-Hg in a 38-year old male who had had a malignant melanoma removed from his right thigh two years prior to admission. A large abnormal area of uptake of the isotope can be seen in the midline and extending to the left side. Surgery confirmed the presence of a large metastatic tumor nodule.

Summary

The uses of radioisotopes in the diagnostic laboratory have been reviewed. These tests are, for the most part, easy to do technically

and have a high degree of accuracy. They involve very little risk to the patient, since small doses of the radioisotopes are usually employed or radioisotopes which have a very short half-life, so that the tissue dose is small. Research is continuing and newer isotopes with shorter half-lives (thus causing less radiation to the patient) will probably be produced in the near future. Refinement of the existing equipment, such as crystal size or shape and the size and shape of collimators, is also being studied. Scintillation cameras are also available, which greatly decrease the time necessary for the scanning procedures, as are body sectioning devices.

However, no diagnostic test is infallible or has 100 per cent accuracy. Certain brain tumors may not concentrate the radioisotope (e.g., oligodendrogliomas) and may not be visualized on brain scanning; therefore, radioisotope tests should be considered another weapon in the armamentarium of the clinician in his war against disease.

Bibliography

1. Quimby, E. H., Feitlberg, S., and Silver, S.: Radioactive Isotopes in Clinical Practice. Lea & Febiger, Philadelphia, 1958.

2. Sklaroff, D. M.: Pennsylvania Med. J. 64:200 (February 1961)

3. McAfee, J. G., Stern, H. S., Fueger, G. F., Holzman, G. B., and Zolle, I.: J. Nuclear Med. 5:936 (December 1964)

4. Libby, R. L.: J. Nuclear Med. 5:887 (December 1964)

5. Charkes, N. D., and Sklaroff, D. M.: J. Nuclear Med. 5:168 (March 1964)

6. Hayes, R. L., Carlton, J. E., and Byrd, B. L.: J. Nuclear Med. 6:605 (August 1965)

7. Berkowitz, D., Croll, M. N., and Shapiro, B.: Gastroenterology 4:572 (May 1962)

530 New Brunswick Avenue

Unsafe At Home

"Safe at home" means scoring a run and possibly winning the game to a baseball player. But it means something entirely different to the American family.

Every year we are greeted with statistics that tell us that we are by no means "safe at home" in the average household. In fact, home can be downright dangerous. Accidents in the home caused 28,500 deaths in 1965, according to the Archives of Environmental Health. And each year, about 25 million home accidents cause injuries serious enough to require medical attention or to restrict the activity of the victim a day or longer.

A host of physical factors are involved in home accidents, such as electrical and power equipment, inadequate lighting, glass doors, abandoned ice boxes, medicines, and many others. But by far the major causes of home accidents are two things — falls and fires.

Falls are the second most common cause of accidental death, next to highway accidents. Falls in and around the home each year cause injuries to nearly 7 million people and 12,000 deaths. Falls on stairs cause 2,000 fatal injuries a year. Proper lighting and sturdy handrails on stairs are important to home safety. A good ladder to aid in reaching high places is much safer than standing on boxes or chairs. The ladder should be firmly placed and braced at the foot. Spilled water or grease or improper waxing of floors causes falls. Loose rugs, scattered toys, and trailing extension cords are hazards. A light switch near the door of each room is a safety measure.

Most of these hazards can be eliminated or minimized by the head of the household. So advise each patient to organize a tour of the house to check for possible "fall hazards." Then ask him to correct these hazards as quickly as possible.

Environmental control, education of patient and parents, evaluation of emotional components, skillful use of symptomatic treatment, and, where indicated, hyposensitization are the keystones of modern management of asthma in children.

Improving the Management Of the Child With Asthma*

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We should be able to manage a child with asthma in a better manner than could have been done 25 years ago. Improvement in treatment, however, does not mean perfection. If each doctor would frankly and critically look at what he does, he would find that there are still many areas in the total management of the child having asthma which could be improved.

Many physicians hope that this improvement will come soon as the result of research. But what of the means of care which we now have? When the physician is busy and the parent or child is a poor historian, the result is a poor history. If the physician does not constantly bear in mind the less common conditions in allergy which can produce wheezing in children, a misdiagnosis will be made.

Etiologic factors are not always easily determined. Skin testing is helpful but not infallible. Environmental control must be reemphasized, and hyposensitization must be reevaluated.

A long, hard look must be given to the choice of drugs for symptomatic relief and also the choice of dose and time of administration. The role of emotions must be carefully considered, remembering that emotional problems exist in anyone with a chronic illness.

Improvement in management consists not only of looking to the new knowledge which we hope will come into our possession over the next few years as the result of current and future research, but also of finding how we can better use the investigative and therapeutic tools now available.

There are no short-cuts to improved management. Lack of time is one of the common factors, for time is something of which the busy physician has a limited supply. However, inability to pose the right question, inability to talk the patient's language, and inability to establish a proper time sequence of events all contribute to a poor history. Providing a patient with some written questions prior to the initial visit is often of value. Sometimes providing the questions at the time of the first visit (with answers to be supplied at the time of the second visit) will yield additional and more accurate information. It is a common experience for the consultant to obtain more accurate information at the time of his questioning than is obtained by the resident. In some instances this is due to more skilled questioning. But it may be due to the questions' having been initially propounded and then the patient's (or parent's) being able to answer them at a later date after some thought. It remains to be seen whether computer technics can improve accuracy of history-taking and also save the time of the physician.[1]

* Mayo Clinic and Mayo Foundation: Section of Pediatrics. Read May 16, 1966, before the Allergy Section, at the Annual Meeting of The Medical Society of New Jersey, Atlantic City.

The history is as important as the skin-test results. Sometimes another review of the history at the time skin-test results are available will provide information previously not obtainable.

Table 1

Conditions in Children Which May Be Confused With Asthma

"Rattle" in throat due to excess saliva or mucus
Acute laryngotracheobronchitis
Acute bronchiolitis
Foreign body in bronchial tree or esophagus
Bronchiectasis
Cystic fibrosis of pancreas
Lymphadenopathy, most common at bifurcation of trachea
Mediastinal tumor including Hodgkin's disease
Anomaly of great vessels at base of heart
Relaxed larynx
Bronchial and bronchogenic cysts (infants)
H-type tracheo-esophageal fistula
Pertussis
Dust bronchitis
Idiopathic pulmonary hemosiderosis
Sighing dyspnea

Wheezing dyspnea in a child is most commonly caused by asthma of allergic origin. "All that wheezes is asthma until proved otherwise." Unfortunately, sometimes we forget the "otherwise." The list of conditions which may compromise the airway of a child and cause wheezing is a long one. The more important ones are in Table 1. One may classify them as intraluminal and extraluminal. The causative factors are congenital defects, infections or inflammations, neoplasms, and foreign bodies. To complicate things a bit, asthma and cystic fibrosis may co-exist in the same child. We have encountered a patient with a foreign body in the respiratory tract as well as allergic asthma. We have also seen a boy with idiopathic pulmonary hemosiderosis who had a number of positive skin-test reactions to inhalant substances. He had been mistakenly considered to have been having recurrent episodes of life-threatening asthma. Pediatricians in general, however, when confronted with a wheezing child, are aware of the need for a careful differential diagnosis. One internist has recently recognized this.[2]

Etiologic diagnosis is too often based on the results of skin testing alone. Some children may have positive skin reactions when the substances to which they react either are not present in the environment or are known (by careful observation) to cause the child no apparent trouble. A positive skin reaction to a substance of itself means only that the patient has reagin in his skin to the substance. It does not mean that the child is clinically allergic to it. There is some evidence[3] to suggest that about 60 per cent of children who have a positive skin reaction to a pollen will subsequently develop clinical allergic disease from that pollen even if it is causing no difficulty at the time of the examination. Since at least 40 per cent of such children will develop no clinical disease, I would reject the attempt to hyposensitize such a child to the skin-reacting substance on the theory that this is prophylactic medicine.

The degree of skin reactivity does not indicate the amount of clinical trouble which a child has to that substance.

In other words, the results of skin testing are *guides* to etiologic diagnosis. The results of themselves are not *proof* that any substances are etiologic agents.

Food allergy in children is a real thing, but has been frequently overdiagnosed. Positive skin reactions to food may not correlate with clinical observations.[4] Skin testing a child to 100 to 200 food extracts as a diagnostic procedure is to be condemned.

One must be particularly careful about elimination diets based solely on skin-test results. If such diets are to be prescribed, they should be only for trial periods of 10 to 14 days in order to confirm the real necessity for their use. The long-term use of elimination diets, however, may at times be essential. When so, the potential dangers of nutritional deprivation or iatrogenic eating problems must be considered.

Environmental control is one of the cornerstones of good management, perhaps the chief cornerstone. Good results seem to be directly proportional to the enthusiasm and skill of the physician who gives the instruction and

to the intelligence and cooperativeness of the parents in carrying out the control measures. There are times when such instruction cannot be followed because of economic or other reasons. I am always amazed, however, at what a fine job parents can really do if they are properly motivated. Dust-proofing starts with a proper clean-up of the bed, not with doing something about the curtains. I have yet to see a room which could be well dust-proofed without encasing the mattress and removing the rugs from the room. Space heaters, gravity-type hot air furnaces, and "pipeless" furnaces are heating systems which cannot be really dust-proofed, though even in a home so equipped some rather extensive dust-proofing can be carried out. Much can be done with a forced type of hot air furnace to eliminate the circulation of dust with the heat. Hot-water-heating systems, baseboard heating, and electric heating allow much better dust control. Pollution of the air in the home by parental smoking, chalk dust, cooking odors, or paint or varnish fumes will often be reasons why a child's asthma continues to be active.

Hyposensitization has been used to some extent for half a century. Its value has not been clearly established, nor do we know why it is effective if it is. We have no way to measure its effectiveness except to ask the parent or the child. Attempting to hyposensitize the child to everything to which he has a positive skin reaction is, to me, poor practice. Not every child having asthma needs to be hyposensitized. Those with seasonal pollinosis seem to have the best results from treatment. However, if the patient shows no improvement after two seasons of treatment, either hyposensitization should be stopped or the treatment mixture should be modified significantly. If six months of treatment with the highest tolerated dose of house dust or mold has produced no beneficial clinical results, one should consider either abandoning it or using a different extract.

Hyposensitization with extracts emulsified in mineral oil is still on trial. This has the advantage of limiting the number of injections. But its safety has not been shown with certainty. Those who have used it know the necessity of making a proper emulsion.

Hyposensitization with alum-precipitated pyridine pollen extract (Allpyral) has been rather widely used. Reports[5] indicate its safety and its apparent efficacy.

There is no objective way to measure clinical improvement from the use of hyposensitization. Until there is, the controversy over its value cannot be settled.[6,7]

Symptomatic drugs must be used with regard to their expected pharmacologic actions and to adequacy and timing of dosage. The drugs of most importance are still epinephrine, ephedrine, isoproterenol, theophylline and its several salts, iodides, and glyceryl guaiacolate. They are useful singly and often in combination. Commercially available combinations of ephedrine or isoproterenol and theophylline with or without iodides or glyceryl guaiacolate have the advantage of ease of administration. They have the disadvantage of forcing the physician to accept drug combinations with fixed ratios one to another. It is an interesting and useful clinical observation that one such combination may help a patient and another may not. When a child is having asthma of significant degree, it is usually best to use the drugs in separate preparations. In this way, the dose of one drug may be increased or decreased without changing the dose of the others. Toxic or untoward effects of drugs must be borne in mind. Asthma is at times a lethal disease,[8] and some of this lethality is iatrogenic. Steroids should never be administered unless they are absolutely necessary. Steroid drugs used for more than brief "bailing out" periods may be habituating.

Infections must be handled with due regard to their etiology. The administration of antibiotic agents each time an asthmatic youngster has an infection is usually not indicated. Many such infections are of viral etiology. No one really knows why many children having asthma or other respiratory allergic disease seem more susceptible to infections. One reason probably is the more ready in-

fectibility of constantly inflamed mucous membranes or the poor mechanical drainage. There are undoubtedly other reasons.

My colleagues and I have not been impressed thus far with the view that a lack of one of the components of the immunoglobulins is responsible. Better and more accurate means of quantitating these components will, in the future, make it possible to be more certain of their exact role. We feel strongly that too often gamma-globulin has been administered needlessly to children having asthma. We frequently have encountered children having asthma who have been given 2 milliliter doses of gamma-globulin, a dose of little or no value in treating a child weighing more than 10 pounds who has hypogammaglobulinemia. We know of no one who has confirmed the report[9] that the intradermal use of gamma-globulin is of therapeutic value in the treatment of asthma in children.

One must be particularly careful to distinguish between the emotional problems of primary importance in *bringing on* the asthma and the emotional problems that are the *result* of the patient's having a chronic disease which interferes with his activity and alters his relationships with the rest of his family.

Table 2

Summary of Important Facets in Management of Asthma in Children

Diagnosis
Clinical
Etiologic
Education of parents and patient
Environmental control
Hyposensitization — when indicated
Symptomatic treatment — skillfully employed
Treatment of infections — when indicated
Evaluation of emotional problems
Individualization of treatment

I summarize this in Table 2. Making sure that all of these things are carefully considered or properly carried out should ensure the best management at the present time of any child having asthma.

However, improvement of the care of the child having asthma in the future lies in an application of the increasing knowledge of immunology and chemical mediator physiology as well as in improved clinical observation. One must steer a careful course between becoming too enamored of immunology and its technics on the one hand, and feeling that present practices are adequate and that immunology contributes nothing to improvement in management on the other. We are just on the threshold of learning how some of the increasing knowledge of immunology may be helpful. We are just learning how pulmonary function studies can be useful in evaluating improvement. We are just beginning to appreciate the importance of rehabilitation measures.

Our current management of children having asthma is very imperfect. I hope that I have shaken some of you, even as I must constantly shake myself, out of complacency with imperfection.

Bibliography

1. Slack, W. V., Hicks, G. P., Reed, C. E., and Van Cura, L. J.: Computer-Based Allergy History. Exhibit at the meeting of the American Academy of Allergy, New York, February 21, 1966.

2. Malt, R. A.: Arch. Int. Med., 117:394 (Mar.) 1966.

3. Chambers, V. V. and Glaser, Jerome: J. Allergy, 29:249 (May) 1958.

4. Speer, Frederic: Detection of Food Allergens. In: *The Allergic Child*. New York, 1963, Hoeber Medical Division, Harper & Row, p. 437.

5. Tuft, Louis, Spiegelman, Jay, Stupniker, Sonia, Brown, Elizabeth, Torsney, P. J., and Gilday, Frank: Am. J. M. Sc., 250:668 (Dec.) 1965.

6. Lowell, F. C. and Franklin, W.: New England J. Med., 273:675 (Sept. 23) 1965.

7. Fontana, V. J., Holt, L. E., Jr., and Mainland, Donald: JAMA, 195:985 (Mar. 21) 1966.

8. Richards, Warren and Patrick, J. R.: Am. J. Dis. Child., 110:4 (July) 1965.

9. Redner, Bernard and Markow, Harry: JAMA, 185:692 (Aug. 31) 1963.

The Mayo Clinic

The author here provides us with a handy little check list for the neurologist or the GP who examines the eyes to give clues to possible cerebral disorders.

Eye Disturbance Associated With Neurologic Disorders

S. Lawrence Samuels, M.D./Plainfield

The retina, in a sense, is part of the brain, and the eye and its adjacent tissues are intimately associated with the central nervous system. It is, therefore, not surprising that ophthalmic findings may be signals of neurologic disorders.

The significant ophthalmologic findings include papilledema, exophthalmos, ptosis, ocular palsy, alterations in visual acuity (as in retrobulbar neuritis), gross field changes, or altered pupillary reactions. A history of sharp piercing pain in the globe or eye socket often occurs in aneurysms of the extradural carotid canal at the base of the skull. There is double vision in gross lesions causing paralysis of the extra-ocular muscles. Subjective symptoms like these help in the presumptive diagnosis. A progressive pulsating exophthalmos is found with rupture of an aneurysm of the cavernous portion of the carotid at the base of the skull.

Papilledema makes the doctor worry about brain tumor, especially if the patient also has vomiting or headache. However, increased intracranial pressure may also be caused by hemorrhage into the subdural or subarachnoid spaces and into the sheaths of the optic nerves. The disc may then be elevated from the adjacent retina as much as 2 to 8 diopters. Disc margins will be hazy, and there may be engorgement of the veins with hemorrhages within or near the disc. It is usually bilateral and an early sign may be enlargement of the blind spot. Visual acuity may remain undisturbed for some time, but there may be obscurations or transitory loss of vision for 5 to 20 seconds daily. At a later stage (when atrophy occurs) there is concentric contraction of the field of vision, and finally, secondary optic atrophy and blindness after several months. Papilledema may also result from sudden reduction of the intraocular pressure. It occurs, too, in some systemic diseases like primary anemia, hypertension and nephritis.

Of interest is the absence of venous pulsation in papilledema. The pulsation of the retinal vein appears when the venous pressure is close to the intraocular pressure. Normally the venous pressure is about 2 millimeters higher, but slight pressure on the eyeball will produce the pulsation and it is often present in normal eyes. As the pressure in the retinal veins increases along with the intracranial pressure, the presence of spontaneous venous pulsation (or of pulsation on very slight external pressure on the eyeball) indicates that the intracranial pressure is *not* raised.

Direct pressure on the intracranial part of the optic nerve prevents papilledema on that side; but in a brain tumor, look for papilledema of the opposite eye with the involved eye showing first a temporal pallor and later a picture of primary optic atrophy with a central scotoma. This "Foster Kennedy Syndrome" is suggestive of a tumor of the frontal lobe of the brain.

Exophthalmus may result from local or general causes. The most common general cause is thyrotoxicosis or exophthalmic goiter. It

is characterized by an abnormally widened palpebral fissure producing a stare, infrequent blinking, lid lag when patient looks down, poor convergence, and difficulty in everting the upper lid. Other signs such as rapid pulse, sweating, weight loss with increased appetite, and a high metabolic rate will help differentiate this disease from the "thyrotropic" form, which is ascribed to excessive excretion of thyrotropic hormone by the pituitary. This second type of exophthalmus was first recognized in patients who had had a thyroidectomy for Grave's disease. It probably does not occur unless there has been a thyrotoxicosis which may have subsided before the patient presents himself. The extra ocular muscles are enormously thickened by fibrosis, massive edema, and cellular infiltrations, and there is usually ophthalmoplegia. High myopia may be mistaken for an exophthalmus.

Local causes are tumors or inflammation of the orbit, diseases of the orbital contents (like varicosities of the orbital veins, sarcomata, and hemangiomas), involvements of the nasal accessory sinuses, and disease of the vascular sinuses as in arteriovenous aneurysm or thrombophlebitis of the cavernous sinus. Intracranial tumors, especially of the sphenoid ridge, may also cause exophthalmos. Hemorrhage into the orbit and inflammation of the orbit, may cause sudden proptosis associated with pain and with limitation of eye movements. The x-ray is of value in diagnosing growths, sinus inflammation and injuries, such as fractures. Roentgenology is indicated in all patients with one sided exophthalmus.

Enophthalmus (sunken eyeball) may be caused by paralysis of the sympathetic nerve, and associated with miosis, or constricted pupil; and with ptosis of the upper lid as a result of loss of action of Mueller's muscle. (This is the smooth muscle which normally keeps the lids open.) Known as a Horner's Syndrome, it is easily diagnosed by instilling a drop of 2 per cent cocaine solution into the eye. Here, the pupil is not dilated, nor is the upper lid retracted by this instillation of cocaine.

A highly useful test is gaging the fields of vision. This is the portion of space in which objects are visible at the same moment during steady fixation of the gaze in one direction. A rough but useful method of testing the field is the "hand movement" or "confrontation" technic. The patient closes the right one, and looks with his left eye toward the right eye of the doctor one meter away. Then the examiner moves his hand from different sides into the field of the patient and repeats this several times. This is done again with the left eye closed. Then move both hands in opposite fields to find out whether the patient sees the two movements at the same time. This is especially useful in patients who seem to have hemianopsia. Thus, a tumor of the pituitary pressing upon the optic chiasm might cause a bitemporal hemianopsia or loss of the temporal fields on both sides. A lesion of one of the optic tracts would cause homonymous hemianopsia; that is, loss of the field on the side opposite the lesion. These chiasmal and suprachiasmal defects may not be total, but even an incomplete large field change is suggestive of the underlying cause. Smaller defects called scotomata are measurable on the tangent screen. The same holds for the blind spot which corresponds to an area in the fundus where there are no retinal receptor elements. This area is the disc and a small zone about the disc. Examining the blind spot is useful in the early detection of glaucoma and papilledema. It lies about 15° temporal to the fixation point and slightly below the horizontal meridian. A loss of central vision (central scotoma) would be suggestive of involvement of the papillo-macular bundle running from the fovea or focal point of central vision to the disc. Two representatives of this type of visual loss are certain kinds of toxic amblyopias as alcohol-tobacco amblyopia, and retrobulbar neuritis, usually associated with multiple sclerosis.

A common complaint is double vision on looking to one side. This is most frequently the result of a paralysis of the external rectus muscle. It may be the first evidence of a vascular lesion or accident along the course of the abducens nerve. It is a good practice to check the eye movements as an integral part of a physical examination.

1111 Park Avenue

This is the fifth of a series of articles on workmen's compensation and industrial rehabilitation in our state.

Rehabilitation Of The Disabled Worker

Rehabilitation Facilities and Personnel*

Jarvis Smith, M.D./Trenton

At different times the word "rehabilitate" has meant various things to various people; sometimes a need, sometimes a procedure, sometimes a process, and sometimes a result.

Medically, rehabilitation has gradually come to mean the restoration of the physical capacity of the disabled person either to his original level or as close to it as possible. Psychological rehabilitation has meant the restoration of an individual's state of mind in order to cope adequately with life's problems. Vocational rehabilitation has evolved from a concept of enabling the individual to perform some traditional task — such as basket weaving — to the present concept of restoring him so that he may become a productive, wage-earning, taxpaying member of the working population. To the social worker, rehabilitation means essentially the restoration of the individual's self-respect and independent status in the community. To the penologist, rehabilitation means the transformation of a criminal into a law-abiding citizen.

Webster defines rehabilitation as the restoration to a former capacity. The National Council on Rehabilitation has defined it as, "The restoration of the handicapped to the fullest physical, mental, social, vocational, and economic usefulness of which they are capable." This definition is broad to include what is sometimes referred to as the concept of total rehabilitation.

Available Services

Our society has recognized that the magnitude of the problems of disability is of such importance that their solutions require national planning, national organization of personnel and facilities, and national legislation.

A number of Federal agencies are concerned with rehabilitation. These include the Veterans' Administration, the United States Social Security Administration and the Public Health Service, and various bureaus of the Department of Labor. The major responsibility, however, resides in the state-federal program of vocational rehabilitation. This program is administered federally by the Vocational Rehabilitation Administration and on the state level by the New Jersey Rehabilitation Commission, located in the Department of Labor and Industry.

Briefly stated, the services provided under the state-federal program to physically and mentally disabled people are: (1) medical diagnosis; (2) counseling and testing; (3) medical care; (4) artificial limbs or other prosthetic appliances; (5) training for jobs; (6) maintenance and transportation costs during rehabilitation; (7) tools and equipment; (8) job placement; (9) job follow-up to make sure both the handicapped person and his employer are satisfied.

*An abstract by Jarvis M. Smith, M.D.—Medical Director, New Jersey Rehabilitation Commission—from the original monograph by Monroe Berkowitz, Ph.D.

Many people and resources of rehabilitation serve the disabled; such as, the physician, the psychologist, the rehabilitation counselor, the social worker, rehabilitation centers and facilities, educational institutions, trade schools, sheltered workshops, hospitals, and employment services. Many services provided under the state-federal program are purchased from these sources since the state agency of vocational rehabilitation does not maintain facilities of its own.

New Jersey's Rehabilitation Commission

In New Jersey, the Rehabilitation Commission has one hundred rehabilitation counselors to serve the rehabilitation needs of the disabled in our nearly seven million population. This is about one counselor to every 70,000 plus population. Included on the staff of one hundred professional counselors are four counselors who serve, specifically, persons who have been industrially disabled.

The requirements for a rehabilitation counselor are a degree in psychology, sociology, or education, plus one year of related experience. Or, he may have a masters' degree in vocational rehabilitation counseling, personnel and guidance, education, psychology or sociology, and no related experience. It is estimated from the National Health statistics that 9,000 people each year come to need and could benefit from vocational rehabilitation services in New Jersey. The state-federal program is limited by statute to providing services to those for whom a vocational objective is feasible.

It has been stated that limitations of funds and staff encourage the Rehabilitation Commission to accept as clients only those persons who, they feel, are the best risks for ultimate employment and whom they can serve with the least cost. It is said that the Rehabilitation Commission places an undue emphasis on quantitative results rather than qualitative results.

Many of these shortcomings, *to the extent that they are valid,* could be improved by more adequate state and federal appropriations. A better understanding and appreciation of the value of rehabilitation services, by those providing medical care, would assist in bringing persons requiring rehabilitation to the early attention of agencies providing services. It should be recognized, however, that the failure to provide health and welfare services, including rehabilitation services, to those in our society who require them is an indictment of our total society.

New Jersey's Rehabilitation Facilities

New Jersey is fortunate in having within its borders one internationally known rehabilitation facility, the Kessler Institute for Rehabilitation. Other fine comprehensive rehabilitation facilities are available to the injured workman, but there is no complete inventory of the services available in New Jersey. A directory should be issued which would identify and locate these services, indicating the special interest of each and the extent to which they can be made available to the injured workman.

Time is often of the essence in a rehabilitation case, and it is recognized that in the case of an injured workman there are sometimes many interested parties to be consulted: the Workmen's Compensation Division, the treating physician, the insurance carrier, the medical staff of the rehabilitation facility, and so forth. Ways must be explored to strengthen communications among all of these so that there may be a quicker resolution of any conflicts relative to the provision of rehabilitation services. The Rehabilitation Section of the Workmen's Compensation Division continues to demonstrate the value of its work.

Staffing Problems

Little can be done in the way of providing adequate rehabilitation services unless rehabilitation facilities, the Rehabilitation Section of the Workmen's Compensation Division, and the Rehabilitation Commission itself are all adequately staffed. This will not come about until the salaries paid to profes-

sional rehabilitation personnel within the state are made competitive with salaries offered in neighboring states. This salary adjustment is needed to attract and retain qualified personnel.

Public Information

The Institute's panel recognized that it would be senseless to build and provide additional rehabilitation facilities unless the physicians and insurance carriers, organized labor, and other interested groups are made fully aware of rehabilitation potential through these facilities. Further, Workmen's Compensation and the Rehabilitation Commission need to develop educational material and programs which will be of help in informing the physicians, insurance claims representatives, community service representatives of organized labor, and others vitally concerned as to the rehabilitation facilities available and the possibilities for the disabled person inherent in their use.

Recommendations

1. The Rehabilitation Section of the Workmen's Compensation Division should be expanded with respect to staffing and budget.

2. A directory should be produced to identify and locate rehabilitation services now available in New Jersey for all areas of disability.

3. A statewide review of present rehabilitation facilities and services should be a first step in planning for additional rehabilitation facilities.

4. Existing facilities should review their present program emphasis to determine whether they are meeting, adequately, the needs of moderately as well as severely disabled workers.

5. The Division of Workmen's Compensation and the Rehabilitation Commission should cooperate with other interested agencies in providing educational information to all professions concerned — public and private agencies, representatives of industry, and organized labor. Specific information should be provided concerning available rehabilitation facilities and the advantages in their use.

6. There is a basic need for increasing the financial support of the state rehabilitation agencies. New Jersey does not appropriate sufficient state funds at present to secure all the federal funds available for vocational rehabilitation of disabled people. The economics of rehabilitation are such that it does not cost, but rather it pays.

7. Speed is of the essence in handling the vocational rehabilitation of workers. To this extent all efforts should be made to improve communications between the attending physician, the physician of the rehabilitation facility, and representatives of the Rehabilitation Commission and the Workmen's Compensation Division.

8. It is useless to expand rehabilitation facilities unless they are sufficiently staffed. Salaries for persons working in the rehabilitation discipline in New Jersey are not adequate to attract and hold qualified personnel in all areas, both public and private. This applies particularly to the New Jersey Rehabilitation Commission.

If this article, or any of the series, stimulates questions, they should be sent to Jarvis M. Smith, M.D., Medical Director, New Jersey Rehabilitation Commission, John Fitch Plaza, Trenton, New Jersey 08625. At the conclusion of the series, Dr. Smith will answer such questions in THE JOURNAL.

John Fitch Plaza

This is, perhaps, the only case of teratoid liver cancer, of this particular pathology, known to be alive and well seven years after diagnosis.

Hepatic Lobectomy For Teratoid Liver Cancer*

Report of a Seven-Year Cure

William O. Wuester, M.D./Elizabeth

Few operations have given me as much personal satisfaction as the one described below. It began seven years ago when an 18-month-old boy was first admitted to the Pediatric Service of Dr. Harold Berger at the Elizabeth General Hospital. He had had an enlarging tumor mass in the right upper abdomen of 10 weeks' duration. There was no nausea or vomiting. Increase in irritability was noted by the parents in the last few weeks, associated with a gradual loss of appetite and weight. A low-grade temperature to daily peaks of 101 was present. Although both parents were physically larger than average, the child was small (22 pounds) and underdeveloped. There were no other symptoms.



Figure 1

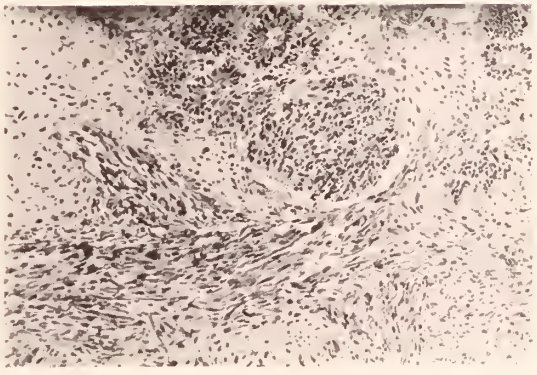


Figure 2

The abdomen was rounded, with visible tumor mass in the epigastrium and right side typical in outline for an enlarged liver. The mass extended to the iliac crest, 5 inches bellow the right costal margin and 3 inches below the left costal margin. Neither spleen nor kidneys were palpable.

Roentgenographic studies were negative except for the enlarged liver. The gamut of differential diagnoses was considered, but for the definitive diagnosis an exploratory operation through a right rectus muscle splitting incision was done after the child received three daily transfusions of whole blood. The entire right lobe of the liver was occupied by a huge mass which filled the right side of the abdomen. The tumor extended to within 15 millimeters of the falciform ligament and was covered with a fine and coarse vascular network. It appeared sharply demarcated. The left lobe was small and measured 12 by 8 by 5 centimeters. Through the limited incision, no evidence of metastatic disease was found.

A Silverman needle biopsy was done. The puncture wound was closed with a 000 chromic suture to arrest the brisk bleeding. The pathologic report was "primary malignant hepatoma."

The family were apprised of the diagnosis, the serious nature of the case, and the risk involved in contemplated resection of the entire right lobe of the liver. The operation was done two weeks after admission under endotracheal anesthesia through a complete right rectus muscle splitting incision. The mass measured 18 by 19 centimeters. Re-evaluation of the abdomen was negative except for the primary mass. By retracting the liver cephalad, the dissection was first carried out in the region of the cystic duct. This struc-

* Presented to the New Jersey Society of Surgeons at Muhlenberg Hospital on November 10, 1965. This work comes from the Surgical Service of the Wuester Tumor Clinic and the Department of Malignant Allied Diseases, Elizabeth General Hospital, Elizabeth, New Jersey.

ture followed in order by the right hepatic artery, right hepatic duct, and right branch of the portal vein was clamped, transected, and ligated. The dissection was then carried along the left portal vessel, the left hepatic artery, and the left hepatic duct into the left lobe of the liver. It should be noted that variations in the hepatic artery may be numerous. Continuous dissection to make certain that the left hepatic artery is supplying the left lobe is essential.

Smaller arteries supplying the right lobe were ligated and transected as encountered. If transection is close to the falciform ligament, more bleeding will occur than if the line of transection is through the line of true liver lobulation. Hemorrhage may be temporarily controlled by compression of the hepatic pedicle up to 15 or 20 minutes. Longer compression may cause destruction of liver tissue. Hemostasis is fairly easily controlled by vessel clamping and ligature with chromic or ribbon sutures. Following this the cardinal ligament, under the dome of the diaphragm, was incised and the right side of the liver was mobilized. Emptying into the vena cava at the level of the dome of the liver were two of the main hepatic veins: one from the right lobe, one from the left lobe, barely visible in the liver substance and requiring careful dissection for absolute identification before ligation and transection of the right lobe vein. Dissection was then carried out from the inferior position along the vena cava, and multiple small hepatic veins were individually clamped, transected, and ligated. About 10 of these were encountered (eight to ten are usually reported). These are short and very fragile.

Following freeing of the right lobe from the inferior vena cava, transection of the liver was completed from a postero-antero direction just to the right and close to the falciform ligament. A satisfactory margin of normal tissue around the tumor was obtained. Hemostasis was checked and a piece of Gelfoam® sewn over the cut surface of the liver. The left lobe was then rotated to the right and placed in the right upper quadrant. The cephalad portion of the falciform ligament was sutured to the medial right leaf of the diaphragm for support. We used 800 cubic centimeters of whole blood.

One point is worthy of note. While dissecting the liver from the vena cava it went into spasm not unlike the vein during some axillary dissections. This led to immediate hypotension corrected in short order with hot packs. Rotation of the lobe with mechanical twisting of the vena cava must also be avoided.

The postoperative course was fairly smooth with temperature variations to 101, 102, or 103 which began prior to the first exploration and continued for 23 days. A small effusion in the right lower chest cleared by the 36th postoperative day.

Microscopic Pathology: In the opinion of A. R. Cassili and J. P. Greeley, pathologists at the Elizabeth General Hospital, the tumor represented an embryonal rhabdomyosarco hepatoma. On the basis of Arey's *Textbook of Embryology*[3] they quote as follows: "Without minutiae and briefly, the primordium of the liver appears as a shallow groove on the ventral side of the future duodenum. The cranial part of this groove forms the hepatic cell cords and ducts which soon invade the mass of mesoderm called the septum transversum. The major part of the liver cords lying in the septum transversum branch repeatedly and organize as left and right systems of anastomosing trabecular cells. As the liver grows, the liver cell cords withdraw from the cranial pact of the septum transversum. The latter is then transformed into the diaphragm. It is conceivable that imperfectly formed liver cell trabeculae incorporated into the septum transversum segregate together and later in life, independent of the surrounding normal liver, grow to form a tumor composed of striated muscle and liver cells as present in this liver tumor."

In personal communications to the author, F. W. Foote and F. W. Stewart[13,31] discussed the tumor as follows: "We have not seen the counterpart of this structural combination. We have undoubtedly rhabdomyosarcoma, partly embryonal-looking, intermixed with hepato-cellular carcinoma. The impression is that cells making up the rhabdomyosarcoma component are in some places being produced by liver carcinoma cells."

Arthur Purdy Stout,[32] who also examined the tumor, expressed his opinion as follows:

"The tissue is composed of masses of epithelial cells which seem largely indifferentiated but in the intervening tissue are many embryonal rhabdomyoblasts with cross striations. This seems to place the tumor in the malignant teratoma class. This must be a really rare

variety of liver tumor. The fasicle on Tumors of the Liver and Intra Hepatic Bile Ducts by Hugh Edmonson has reference to only 5 teratomas, all of which show a variety of different kinds of tissue instead of only 2 as in this case. Possibly, therefore, it might be more accurate to call this tumor a carcinosarcoma, which is probably rarer in the liver than a teratoma."



Figure 3

Postoperatively, penicillin and cortisone were given for protection against infection during a debilitated state and because cortisone has been found to increase liver regeneration. Preoperatively, the marked anemia was interesting, and probably represents the same type of anemia that occurs in chronic hepatic disease and may be a result of deficiency in essential amino acid-protein synthesis or lack of folic acid and B_{12}. Blood volume studies with RISA were not valid, giving lower results than anticipated. Subsequent studies on a gram weight of normal and neoplastic liver tissue revealed 37 per cent more radioactivity per Gram of neoplastic tissue. The invalid blood volume studies are ascribed to this.

With cooperation of the parents, this child has been followed every three months. His development both mentally and physically has been within normal limits. In March 1964, tonsils and adenoids were removed without complications. Repeated blood and liver battery tests have all been within normal limits. A radioactive liver scan with rose bengal has been considered, but we have hesitated because of the age of the patient and its purely academic value. At the seven-year postoperative milestone he presents himself as a normal, healthy boy with no evidence of his former disease.

Conclusion

This is a rare case of total right hepatectomy, alive and well seven years after complete right hepatectomy — the only one I know of living over five years with this particular pathological picture.

A bibliographic listing of 36 citations appears in Dr. Wuester's reprints.

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Sweet stimuli can cause pain; but a passion for sweets —the traditional "sweet tooth"—is something else again.

Sweet Tooth: Fact or Fiction?

Woodrow S. Monica, D.M.D./Orange

Teeth have feeling besides pain. This sounds strange because teeth are covered with the hardest substance in the body. Stranger is that the sensory carrying mechanism is unknown. Dentists have not shown that nerve fibers extend from the pulp to the enamel. Yet dental pulp, like other connective tissue, contains Class A,B,C, and sympathetic fibers. Surely there must be a reason for this. The economy of nature doesn't permit redundant structures or functions.

If we apply to teeth the same criteria for perception as we do for other tissues, we make some interesting observations. We know that pain has no "adaptation." Touch an exposed pulp or hypersensitive dentin repeatedly and it will hurt; it will hurt as long as the sensory carrying mechanism is intact.

Cold and heat *do* have "adaptation." Isolate several anterior teeth with a rubber diaphragm, rinse with water gradually lowering the temperature from 32* to 10* and the patient will perceive no pain. But rinse with water at 32*, then suddenly with water at 10*, and the patient will feel pain. The sudden gradient from 32 to 10* did not allow for "adaptation." The same tests can be done by raising the temperature from 32* to 44*.

Pain has no spatial summation. Pain from one exposed pulp is as intense as pain from two pulps. An acutely abscessed tooth and a painful aphthous ulcer result in pain only from the abscessed tooth. The pains do not add up. But cold and heat *do* have spatial summation. Isolate one front tooth with a rubber diaphragm and rinse with water at 13*; it will feel cold. Isolate six teeth, rinse with 13* water, and the teeth will feel colder. This experiment can be repeated by biting into sections of a refrigerated apple.

Another criterion for perception is dissociation. We can prove it for heat, cold, touch, electric, and chemical stimuli. For example, a tooth sensitive to heat and cold if covered with an aluminum crown will perceive no sensation. A tooth sensitive to touch (usually at the gum line) if coated at that point with varnish will perceive no touch sensation. Weak electric stimuli are usually felt as "twinges" but not as pain. If the stimulus is increased, it will cause pain. (Remember: *any maximum stimulus causes pain.*) Chemicals such as sugar are felt in varying degrees from an ordinary sensation to a painful one. An anesthetized tooth can be painless to surgical removal yet sensitive to a blast of cool air.

Cold, heat, and touch differ from pain in another respect: They cannot be modified by ordinary analgesics. Aspirin, for example, often relieves a painful toothache; but it has no effect on cold, heat, and touch sensations.

Pulpal nerves exhibit many characteristics of other nerve-bearing tissues. An exposed nerve or hypersensitive dentin causes a sharp, bright pain that slowly diminishes and lingers as a dull ache. These are "fast" and "slow" pains that compare with the pains from striking a finger with a hammer.

You may have experienced spontaneous pain after a dental visit. A recent amalgam filling

* Centigrade degrees.

adjacent to a gold inlay will cause a galvanic current and intermittent sharp pains. Large fillings — gold, silicate, or amalgam — often cause sharp twinges for a short time.

The degree of an injury bears no direct relationship to pain. A large cavity is often less sensitive to pain than an incipient cavity. A small cavity is often more sensitive to drilling or to sweets than a larger cavity.

Hyperalgesia is a factor, too. Inflamed gums, infected maxillary sinuses, decay, dental drilling, and filling materials do cause hypersensitive teeth. Fortunately, the hyperalgesia, in most instances, is temporary.

Striking the ulnar nerve causes a sensation in the finger at a considerable distance away. This is similar to touching the lingual or inferior dental nerve in a mandibular injection. The sharp pain is felt in the tip of the tongue, lip, or anterior teeth.

Causalgia is a rare dental complaint; its validity cannot be demonstrated. After an extraction (months and years later) a patient may complain of "feeling" in the missing tooth.

Emotional factors influence dental perception. Some men, during a wife's pregnancy, develop sympathetic pains (couvade). And one of the symptoms is intermittent toothache. It disappears after the delivery.

310 Main Street

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No longer seen simply as a research tool, coronary arteriography can now be helpful to the clinician.

Coronary Arteriography For The Clinician*

Eliseo Comiso, M.D.
Wadsworth, Kansas†

The most obvious clinical application of coronary arteriography is in selecting for coronary surgery appropriate patients with disabling angina. Patients about to undergo an operation for the relief of angina should have coronary arteriography done in advance to exclude those with angina-like symptoms who have no organic coronary artery disease. For those who subsequently prove to have coronary artery disease on coronary arteriography, objective information may be obtained about the severity and location of the arteriosclerotic obstruction. This will permit a better selection of the type of surgical procedure, if operation *is* regarded as advisable. The selection of patients for coronary endarterectomy, for example, or for any type of surgical procedure designed to repair directly the obstructive lesion, rests entirely on the findings of coronary arteriography. Patients suitable for this type of operation are those with localized segmental occlusion of a larger coronary vessel. Those with multiple areas of occlusion (or with occlusion of more peripheral branches) are usually not suitable for this direct procedure. They may, however, be considered for the other types of revascularizations, such as the Vineberg's procedure or Beck's operation. Recent studies[1,2] on necropsy materials as well as on patients[3,4] evaluated by coronary arteriography permit one to draw the conclusion that when coronary artery disease becomes clinically manifest, extensive involvement of two or more major coronary arteries is to be expected in most cases. Only in some 12 per cent is the disease localized[1,2] and theoretically curable by endarterectomy. The left anterior descending coronary artery is slightly more frequently involved than the right coronary artery,[2] and the left circumflex artery is the least involved.[5] Any technic for wide application would have to include provisions for clearing at least two or more coronary arteries, perhaps over several centimeters.[2]

In postoperative follow-up, coronary arteriography is useful in demonstrating the patency of the endarterectomized or grafted coronary artery. It also provides an objective method of evaluating the effectiveness of the various surgical procedures designed to revascularize the heart. For example, it has been shown that the left internal mammary arteries implanted into the left ventricular wall (Vineberg's procedure) effectively perfused the myocardium, whereas it was impossible to demonstrate myocardial perfusion from branches of the internal mammary arteries following poudrage and partial coronary sinus ligation.[6]

Coronary arteriography also finds a wide clinical application in the differential diagnosis of atypical chest pain. If the chest pain is incapacitating, a coronary arteriogram is indicated, since a precise diagnosis is essential for proper therapy. If coronary artery disease is proved, treatment could be directed more

* This work, from the United Hospitals of Newark, was supported by a grant from the New Jersey Heart Association.

† Dr. Comiso, now with the Department of Surgery, V.A. Hospital in Wadsworth, Kansas, was a Fellow in Cardiac Surgical Research at Newark's Presbyterian Hospital at the time this work was done. Reprint requests should go to Dr. Comiso at the Kansas address.

vigorously. If the coronary arterial system is shown to be normal, the patient can be reassured that his symptoms are *not* from coronary artery disease. Thus, the production of iatrogenic disability on one hand and unjustified reassurance on the other could be avoided.

Patients with severe aortic valve disease who are being considered for aortic valve surgery but who also complain of angina pectoris should have a coronary arteriogram. This could be done in the course of doing left heart catheterization for evaluating the valvular lesion. If the pain is related to altered valvular hemodynamics, relief can be expected to follow aortic valve surgery. But if there is severe coronary atherosclerosis, relief of pain cannot be anticipated and may, indeed, preclude attempts at surgery because of the greater risk involved.

Patients with suspected anomalous origin or distribution of the coronary arteries could also be evaluated by coronary arteriography. Anomalous origin of one coronary artery from the pulmonary artery most often involves the left coronary artery. This anomaly is rarely compatible with more than a few months of life and produces cardiac enlargement, myocardial infarction, and heart failure. With coronary arteriography, one can also observe the direction of flow through the anomalous vessel which is generally governed by the pressure gradient between the aorta and pulmonary artery. Generally the flow through this anomalous coronary vessel is reversed because of the higher pressure in the aorta. The high mortality associated with this anomaly makes obvious the importance of early diagnosis and its surgical treatment. The much rarer anomaly (that is, where the right coronary artery arises from the pulmonary artery while the left arises in a normal manner from the aorta) had been shown[7] to be compatible with a normal life expectancy.

Congenital anomalies of the heart that are amenable to open heart surgery are frequently associated with anomalous distribution of the coronary arteries. These anomalous distributions are generally considered of no clinical significance except that their presence in the region of the right ventricular outflow tract does increase the danger of the usual right ventriculotomy incision. Death from division of these vessels has been reported by Senning, Kirklin, and Friedman.[12] They are most frequently encountered in the transposition complexes and in tetralogy of Fallot with marked dextroposition of the aorta. To a lesser extent, we see these in cases of ventricular septal defect and pulmonary stenosis. A knowledge of the existence of such anomalies can be obtained beforehand only with a coronary arteriogram. This can be carried out in conjunction with the usual cardiac catheterization and cineangiocardiographic investigations of the patient. However, in actual practice, this study is rarely done.

Another application of coronary arteriography is in patients with suspected coronary arteriovenous fistulae or fistulous communication of the coronary artery into a cardiac chamber. Such anomalies may constitute a significant left to right shunt or be the site of bacterial endocarditis. These lesions are generally correctable, but prior knowledge of their location and extent (vital to surgical correction) can be obtained only through coronary arteriography.

Lastly, coronary arteriography offers a prime potential as a research tool regarding blood flow, anatomy, and pathophysiology. Distribution of vessels, location of lesions and collateral patterns can be correlated with the natural history and prognosis. Such studies will provide anatomical-clinical correlation for the living hearts similar to the classical clinical-pathological studies by Blumgart[8] and Schlesinger.[9] Serial studies of coronary anatomy may be useful in the evaluation of therapy, such as in the laboratory or clinical investigation of the response of the coronary circulation to various pharmacologic agents.

In a recent review of the subject of coronary arteriography,[10] we found that the selective method of Sones[11] appeared to be superior to any of the presently available technics.

Bibliography

1. McDonald, R. *et al.*: Surgical Forum, 8:278 (1957)

2. Crawford, T. *et al.*: Lancet, 1:181 (1961)

3. Thal, A. P. *et al.*: Journal of the American Medical Association, 168:2104 (1958)

4. Lang, E. K. and Sabiston, D. C.: Radiology, 76:32 (1961)

5. Pitt, B. *et al.*: Circulation, 28:35 (1963)

6. Sones, F. M. and Shirey, E. K.: Modern Concepts of Cardiovascular Disease, 31:735 (1962)

7. Burch, G. E. and Desquale, N. P.: American Heart Journal 63:720 (1962)

8. Blumgart, H. *et al.*: American Heart Journal, 19:1 (1940)

9. Schlesinger, M. J.: Archives of Pathology, 30:403 (1940)

10. Comiso, E. and Poulos, P. P.: Coronary Arteriography: A Review. *(In press)*

11. Sones, F. M. and Shirey, E. K.: See citation 6 above.

12. Senning, A., Kirklin, B., and Friedman, S.: Cited by Thal.[3]

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Atrial fibrillation is a rare sequel to accidental shock. This is only the 14th case ever reported in the English language literature.

Transient Atrial Fibrillation Following Accidental Electric Shock

A Case Report

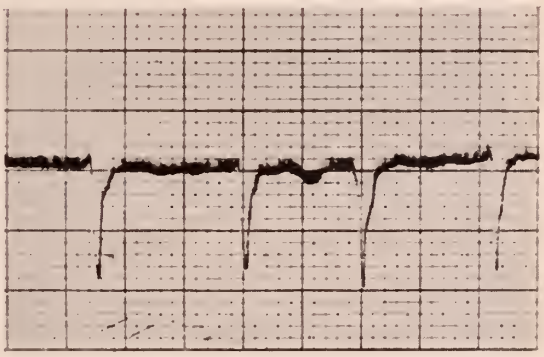
Fred W. Wachtel, M.D. and Donald Rothfeld, M.D. / **Irvington**

Atrial fibrillation following electric shock (by whatever means) is a rare finding. We recently had the opportunity to observe a patient who had atrial fibrillation after being accidentally shocked while working with an electric pump.

A 44-year-old construction laborer was admitted to Newark Beth Israel Hospital at noon, in no apparent distress. Three hours earlier, while working in a muddy, wet area with an electric pump, he received an electric shock in both hands. According to witnesses, he was thrown an unknown distance and was found to be unconscious. He ceased respiring but "his heart continued to beat." After five minutes of mouth-to-mouth respiration, he regained consciousness and spontaneous respiration. He was seen by a physician for the first time an hour before admission. The doctor noted irregular cardiac rhythm on auscultation.

In the hospital, we found a well-developed, well-nourished man in no distress. The temperature was 99 and respirations were 18. Blood pressure was 130/90 and pulse rate 110 and irregular. The head, eyes, ears, nose, and throat were normal. The neck was supple. The chest was clear to percussion and auscultation. Examination of the heart revealed no cardiomegaly and no murmurs. Ventricular rate was 88 and irregular. A_2 was greater than P_2. A sharp, non-tender liver edge was palpable one fingerbreadth below the right costal margin on deep inspiration. There were no abdominal masses nor abdominal tenderness. There was no evidence of electrical burns on the hands. Tendon reflexes were symmetrically depressed to absent throughout. Electrocardiogram on admission showed atrial fibrillation.

The patient had entered the United States only four months prior to this accident. He had had a meticulous immigration physical examination. He was not informed of any cardiac abnormality. The patient was presently aware of irregular heart activity, but denied that he had ever had it before. He also denied chest pain, dyspnea on exertion, peripheral edema, orthopnea, paroxysmal nocturnal dyspnea, or previous heart disease. He had engaged in strenuous physical activity as a construction laborer with no ill effect. Blood count, sedimentation rate, and urinalysis were normal. The fasting sugar was 108. BUN was 20. The SGOT and LDH on the first and second day of admission were 30 and 20 and 250 and 200 respectively.



A short strip of VR demonstrating atrial fibrillation.

Management consisted solely of careful observation. Routine electrocardiogram on the second day after admission showed regular sinus rhythm, which continued throughout the hospital course. He was discharged from the hospital on the fourth day.

We have been able to find only 13 reported cases[1-12] of atrial fibrillation following accidental shock or electro-convulsive shock therapy in the English language literature. The common effect of electrocution of any form on the heart and central nervous system is ventricular fibrillation and "electric coma" of varying degrees and duration.[13]

The human body becomes a conductor when in contact with electric current. The amount of current received depends on resistance at the point of contact, intensity and voltage applied, pathway of current, and type and frequency of current.[1]

For practical purposes, all of the body's resistance resides in the skin, which varies from person to person. Dry skin is an excellent insulator. Perspiration greatly lowers skin resistance.

Electrically induced cardiac irregularities are related to the intensity of amperage to which the heart is exposed. It has been noted[12] that currents of 25 milliamperes or less have no effect on cardiac rhythm. A transient pause in ventricular rhythm, followed by an irregular beat, finally followed by normal rhythm is seen after stimulation with currents between 25 and 75 milliamperes. Currents between 75 milliamperes and 4 amperes produce ventricular fibrillation. With currents greater than 4 amperes, cardiac arrest is noted, which persists as long as current flows. Regular sinus rhythm ensues when current ceases. This, of course, is the mechanism of electrical defibrillation.

Experimentally, most workers[1] have shown that current required to produce ventricular fibrillation is of much smaller magnitude when passed from upper to lower extremity than from upper to upper extremity.[13] Clinically, however, Lee,[14] in a study of industrial accidents, found no marked association between pathway and heart symptoms.

Alternating current is much more dangerous than direct current.[15] Alternating currents of 40 to 150 cycles per second are the most dangerous; these are the alternations most frequently encountered in industrial currents.

Experimentally, many different arrhythmias can be produced by direct stimulation of the heart, depending on intensity of stimulation and upon the phase of the cardiac cycle. Lown *et al*[16] have shown that, within each cardiac cycle, there is a period especially susceptible to ventricular fibrillation. They were able to produce ventricular fibrillation consistently when a synchronized shock fell just before the apex of the T wave of the surface electrocardiogram. The duration of this "vulnerable period" was noted to be 20 to 40 milliseconds in the mammalian heart. Similarly, Sano and Scher[17] electrically induced atrial fibrillation in anesthetized dogs by applying stimuli as the atria reached the peak of contraction. This delivered a Direct Current stimulus just before electrical repolarization ended, i.e., in the atrial "vulnerable period." Repetitive stimulation was occasionally required. In many cases, atrial fibrillation was transient. It is probable that our patient received his shock during the "vulnerable period" of his atria, which produced a transient atrial fibrillation.

The management of our patient consisted solely of observation. No specific antifibrillatory treatment was tried. Within 24 hours, the arrhythmia spontaneously reverted to a normal sinus mechanism. Three previous case reports[5,7,11] support this finding. Two of these reverted within three hours. The third was seen only after four days when a normal sinus rhythm was recorded. Digitalis has been used successfully in two.[1,4] Potassium bromide was used in one with success.[2] Quinidine has been used successfully[3,8,9,10,12] in daily quantities of 1.2 Grams in divided doses every four to six hours.

In all cases, atrial fibrillation terminated either spontaneously or after the use of various medications. There are no reports of permanent cardiac damage or of peripheral embolization. It would be reasonable to expect that if the patient can survive the initial electric shock, no sequellae need be expected, although the series of patients reported is too limited for statistical analysis.

It is interesting to speculate as to whether specific antifibrillatory medication is required for this disorder. At least three cases (including ours) reverted spontaneously to a sinus mechanism within 24 hours. Is this the natural history of this disorder? Morgan *et al*,[12] concluded that quinidine is the drug of choice

because of the "potential hazard of peripheral embolization, perhaps to the brain, with disastrous results, in every case of atrial fibrillation."

We feel that this is an unusual occurrence in the normal heart and recommend only careful observation for 24 to 48 hours. If reversion does not occur, then quinidine or electrical cardioversion may be indicated.

Summary

A case of transient atrial fibrillation following accidental electric shock is reported. The arrhythmia spontaneously reverted to sinus rhythm within 24 hours. The effects of electric currents on the heart are discussed. Management of this disorder appears to be careful observation for 24 to 48 hours in the previously normal heart; if spontaneous reversion does not occur, then quinidine or electrical cardioversion may be indicated.

We are indebted to Dr. Max Waleson for allowing us to manage this patient.

A bibliographic listing of 17 citations appears in the authors' reprints.

40 Union Avenue (Dr. Wachtel)

Academy's Scientific Sessions

The Academy of Medicine of New Jersey announces the following scientific sessions in January, 1967.

Date and Hour	*Place of Meeting*	*Subject*
Jan. 10—8 p.m.	Academy of Medicine, Bloomfield	Dermatology—Unusual Cases
Jan. 11—8 a.m.	Princeton Hospital, Princeton	First Ten Days of Life
Jan. 12—6:30 p.m.	Essex House, Newark	Renal Hypertension
Jan. 18—9:30 a.m.	St. Michael Hospital, Newark	The Anemias
Jan. 19—9:30 p.m.	Passaic General Hospital, Passaic	Therapy of Lymphomas
Jan. 20—8 p.m.	Newark Eye and Ear Infirmary, Newark	Corneal Surgery
Jan. 20—9 a.m.	Columbia-Presbyerian Medical Center, New York	Thyroid Clinic
Jan. 25—6 p.m.	Robert Treat Hotel, Newark	Carcinoma of Head and Neck

For more details, write to The Academy of Medicine, 317 Belleville Avenue, Bloomfield, New Jersey.

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Date ..... Signed ..... M.D.

Dr. Keim here gives a compact monograph on surgical management of neck and facial tumors.

Surgical Management Of Tumors Of The Head And Neck*

W. Franklin Keim, M.D./Montclair

Any surgical attack on tumors of the head and neck must be based on precise knowledge of the pathology of these lesions and of their behavior patterns. One does not do a neck dissection for a non-metastasizing primary lesion, nor does one sacrifice a facial nerve for a benign mixed tumor. The surgeon simply must know by prior biopsy, if possible, the exact nature of the lesion he is treating. Then he can construct a definitive plan which will offer the patient the best chance of cure. That this first chance may be the only chance for salvage is a truism too little understood by those who occasionally dabble in the treatment of malignant disease.

Biopsy should, preferably, be done by the surgeon who will carry out the definitive therapy. In no case should excisional biopsy be done.† Indeed, the excision of small ulcerated lesions of the gingiva, floor of mouth, or palate for diagnosis is an error which makes subsequent management difficult. It is guesswork to estimate the amount of tissue which should be resected when confronted with a healing, more-or-less inflamed wound that gives no clue to the size of the original lesion. It is poor practice to do an open biopsy of a neck node, since this often makes it impossible to do a clean neck dissection, if required later. A thorough search of the upper respiratory tract for a primary lesion is mandatory in the presence of a mass in the neck of unknown etiology. If no primary can be detected, aspiration biopsy of the cervical mass will yield a definitive histologic diagnosis in about 85 per cent of cases. Open biopsy may then be used on the small residual which defies identification by aspiration.

How about screening oral smears for malignant cells? The upper respiratory tract is so accessible to careful scrutiny and easy biopsy that it is a waste of a pathologist's time to ask him to screen thousands of smears. If one is familiar with normal tissues and uses one's eyes and fingers diligently, I am sure that the detection of malignant disease in the head and neck region will be more enhanced than by reliance on casually taken cytology smears. It may be that someday microscopes linked to computers will screen specially stained smears and yield a mathematical breakdown of DNA and RNA that will distinguish between benign, pre-malignant, and malignant lesions. But, to my knowledge, there is only one of these complexes in the country today, and its work is in a very preliminary phase.

The best chance for a cure of cancer with our present methods of treatment lies in early detection and treatment. Yet, even today one often encounters a defeatist attitude in some segments of the profession when a malignant disease is diagnosed. It is as though some still harbor the idea that once a cancer always a cancer; and that the disease may be arrested for a time, but sooner or later will catch up

* Read May 28, 1966 before the New Jersey Academy of Ophthalmology and Otolaryngology.

† One possible exception: a readily identified small basal cell carcinomona carinoma of the skin. Even then, you sometimes get a surprise!

with the individual. I should like, therefore, to show you what can be accomplished by a relatively limited form of surgery in certain tumors involving the head and neck, provided they are detected at a reasonably early stage. More aggressive — and at times mutilating or disabling — procedures must still be needed for advanced cases if any hope of salvage is to be offered to the patient unfortunate enough to have progressed to such a point.

Carcinoma of the lip readily lends itself to the philosophy of preserving function and acceptable appearance, provided the lesion is detected and treated at an early stage. Almost all are squamous cancers and more than 90 per cent involve the lower lip. Where the lesion is less than a centimeter in diameter, simple wedge excision with primary suture of the defect will cure the tumor. But it will not shorten the lip to a disabling extent. Larger lesions requiring sacrifice of more tissue will necessitate flap replacement. I am partial to one or another of the modifications of the Estlander procedure, which makes use of tissue from the opposing lip. The flap rotates 180 degrees on a pedicle containing the coronary artery of the lip and need be only half the size of the defect it fills, since this equalizes the two lips after completion of the repair. Whether a bridge is used, requiring later separation, will depend on the presence of uninvolved commissures. Construction of a new commissure detracts from the cosmetic result, but continence of the mouth is usually undisturbed. The flap which at first is edematous and discolored because of interruption of the venous return) gradually assumes the texture and consistency of the rest of the lip, so that the end result is quite acceptable. I usually avoid a neck dissection, unless nodal metastasis has already occurred, since only about 6 per cent of patients with lip carcinoma will develop metastatic disease after the primary lesion is controlled.

Control of carcinoma of the floor of the mouth and anterior gingiva likewise permits the use of relatively limited procedures when the disease is detected in its early stages. Small lesions lying on Wharton's duct (with adequate normal tissue between it and the gingiva) may simply be excised with primary closure. If you fear limitation of motion of the anterior tongue with impairment of speech, you can rotate a flap from the lateral aspect of the tongue forward into the defect. Larger lesions and those impinging on or actually involving the gingiva, *but without bone invasion,* will require segmental or marginal mandibulectomy to clear the tumor adequately. Here the lip must usually be split for proper exposure. Because of the higher incidence of nodal metastasis, a neck dissection becomes advisable or even mandatory. Suture of the external gingiva to the under surface of the tongue results in some speech defect, which often improves as stretching of the tissues permits greater flexibility of the tongue.

Another region in which so-called conservation surgery permits preservation of function is the hypopharynx. Ogura,[1] Som,[2] and others have pointed out the efficacy of certain procedures aimed at preserving laryngeal and esophageal function in carcinoma of the arytenoid, epiglottis, and base of tongue, with cure rates comparable to those of more radical operations usually employed for such lesions. For carcinoma of the epiglottis or vallecula, such surgery usually includes neck dissection plus resection of the entire epiglottis and part of the base of the tongue, depending on the location and extent of the tumor. Speech is not greatly affected since the vocal cords are not involved, but deglutition can be a real problem, especially in the first few weeks post resection. Myotomy of the inferior constrictor muscle is an essential part of these operations and may make the difference between success and failure. In time, most of these patients learn to swallow, but only with diligent effort on their part and patience and encouragement on the part of the surgeon. Certainly salvage of the voice is an estimable goal provided one does not court recurrence by removing the tumor with too narrow a margin of normal tissue.

Perhaps nowhere in head and neck surgery is the diagnostic and therapeutic acumen of the

surgeon tested so thoroughly as in the management of tumors of the salivary glands in general and of the parotid in particular. The variety of pathology which involves these structures is itself a challenge both to the clinician and to the pathologist. Only the most astute can pick his way among the variants carefully enough to stay out of trouble. Foote and Frazell[3] laid the groundwork for the more intelligent treatment of these tumors in their 1954 review of the pathology and clinical behavior of the salivary gland neoplasms. But even the most experienced pathologists may occasionally be stumped in attempting to give an accurate interpretation of any given specimen.

Aspiration biopsy again is a tool of great value in the identification of these tumors, and I have yet to see any instance of seeding or other damage from its use in parotid tumors. It is a tremendous help to know in advance that a tumor is benign or malignant, since the same surgery may not fit both categories. My discussion will include only the treatment of benign lesions, involving as they do the preservation of the facial nerve.

Any attack on a parotid tumor must have as a fundamental the prompt identification of the facial nerve. One never knows where it will be in relation to the tumor. In most instances it tends to lie deep to the lesion. Our routine is to pick up the main trunk as it crosses the space between the stylo-mastoid foramen and the parotid, though in some cases where the tumor is intimately bound to the anterior surface of the mastoid, it may be necessary to identify the mandibular branch first and trace it back to the main trunk. If the tumor lies superficial to the nerve, resection of the portion of the gland lateral to it will include the lesion. This is not too difficult. Great care must be taken not to rupture the tumor, as seeding of the wound by its spilled contents will surely result in recurrence. Those lesions which lie deep to one or more branches of the nerve must be carefully delivered by springing the nerve upward or downward from the tumor, after careful isolation of the branches concerned. These patients are likely to have a temporary paralysis of the face, which will clear in from one to about eight weeks. Recurrence in patients handled in this manner should run less than 4 per cent. Permanent facial paralysis should never occur.

The management of recurrent mixed tumors in the parotid is more difficult. This is because of the multiplicity of nodules that are the rule and their intimate relation to one or more branches of the facial nerve. The same principles apply as outlined for the treatment of primary mixed tumors, but dissection must be more meticulous, so that all nodules are removed intact and as little of the nerve damaged as possible. Sacrifice of a major segment of the nerve demands the use of a nerve graft, usually from the cervical plexus. In only one instance have I had to sacrifice the entire nerve for recurrent benign mixed tumor. A graft inserted at the time yielded an acceptable cosmetic result some fourteen months later. The recurrence rate in surgery of recurrent mixed tumors varies in the literature from 28 to 42 per cent, but should run below the former figure with careful management.

Summary

A review of the basic principles on which intelligent treatment of head and neck tumors must rest has been presented. In certain categories, relatively limited procedures will suffice to eradicate the neoplasm with acceptable cosmetic and functional results, provided the lesion is detected and treated in an early stage.

Bibliography

1. Ogura, J. H. *et al.*: *Laryngoscope,* 71:258 (March 1961)

2. Som, M. L.: New York State Journal of Medicine, 61:2567 (August 1961)

3. Foote, F. W., Jr. and Frazell, E. L.: *Cancer,* 7:637 (1954)

75 Union Street

The role of radiation therapy in bladder malignancies is outlined and detailed in this meticulous study.

Radiation Therapy In The Management Of Bladder Neoplasms*

Luther W. Brady, M.D., Donald S. Faust, M.D. and G. J. Gislason, M.D.

Philadelphia, Pa.

Radiation therapy in carcinoma of the bladder is made difficult by the fact that the organ is relatively deep-seated, virtually surrounded by bone, and close to other vital pelvic structures. It is a tumor of limited radiosensitivity requiring large dosages. Orthovoltage modalities in this disease have been limited in effectiveness by the necessity for elaborate multifield or rotational technics and also by the severe reactions produced in an attempt to deliver adequate tumor dosages.

During the last decade, advances in radiotherapy have considerably extended the possibilities of treatment for this malignancy. Supervoltage modalities now give us a way of treating more advanced tumors with radiation dosages that could not ordinarily be delivered by orthovoltage technics. The supervoltage modality allows an improved dosage distribution within the volume being irradiated. Immediate reactions are less severe and better long term results may be expected.

This study represents the experience of a clinical team using supervoltage radiation therapy in carcinoma of the urinary bladder. That experience falls into three categories — palliative radiotherapy, definitive radiotherapy, and radiation therapy as a pre-operative procedure.

Case Material

In the interval from 1948 through September 1963, 69 patients were selected for treatment using the two million volt Van de Graaff generator. Histologic classification was made with great care in terms of specific cellular alterations which were malignant in character, and by evidences of tumor infiltration into and through the muscularis.[1] Transitional cell carcinomas of the bladder were demonstrated in 59 patients, anaplastic carcinoma in 8, and squamous cell in 2. Patients' ages ranged from 36 to 86 years with a median of 64. The subjects included 19 females and 50 males.

After complete clinical workup the "staging" of the lesion was made by the radiation therapy and urologic staffs after careful bimanual examination under anesthesia. This was done to separate non-infiltrating from infiltrating lesions. The cystoscopic study determined thickness, location, multiplicity of lesions, and state of the mucosa. A biopsy specimen (deep and multiple) was taken. Roentgenographic studies (cystogram and intravenous urogram) were, of course, done. The patients were "staged" according to Rubin's classification.[2] Three essential groups

* Read at the Annual Meeting of The Medical Society of New Jersey, May 16, 1966, this paper comes from the Departments of Radiology and Urology at Hahnemann Medical College in Philadelphia. The project was supported by a grant from "The Friends of the Radiation Therapy Center of the Hahnemann Hospital."

of patients emerged from this classification. Group I (superficial stage — low grade) would include papillomas that show evidences of invasion and atypical features histologically, (stage O, A, B1, and grades 1 and 2). Group 2 (deep stage — high grade) would include those with deep invasion with an advanced histologic grade (stage B2, C, and grade 3, 4, and 5). Once definite extension of the infiltrated process to the surrounding perivesicle tissues was noted, the cases were classed as metastatic and high grade, Group 3 (stage D and grades 3, 4, and 5).

Method

Stationary external beam supervoltage modalities were utilized with the two million volt Van de Graaff generator in preference to interstitial or intracavitary irradiation. These latter patients have been excluded from this study.

Radiation therapy utilizing the supervoltage modality in a palliative manner was given to 9 patients. The median tumor dose was 2200 rads delivered in a median elapsed time of 11 days.

Fifty-four patients were treated in a definitive manner with a median tumor dose of 6300 rads in a median elapsed time of 56 days.

Six patients received radiation therapy preoperatively for a calculated tumor dose of 4000 to 6000 rads delivered in 26 to 39 elapsed days with total cystectomy following in 6 to 12 weeks after the completion of the radiation therapy.

Results

Of the 9 patients treated palliatively, one survives with no residual tumor within the pelvis on clinical examination, 57 months after completion of treatment. Eight patients died from their malignancy with a median survival time following the radiation therapy of only 19 days (Table 1). Five of the 8 patients who died received 5-fluorouracil just prior to the radiation therapy.

Among the 54 patients treated definitively, 13 are alive at the time of the evaluation without evidences of persistent or recurrent malignancy on clinical examination. Of the remaining 41 patients (who had been treated definitively), 40 died with recurrent or metastatic malignancy. One patient died without evidence of malignancy, the cause of death being sepsis. Local persistence of the disease process involving the bladder was present in 35 patients who died. Death was due to metastatic disease in 5 patients with no evidences of recurrence of the local bladder disease.

Five patients were irradiated definitively in Group 1. All continue to survive without evidences of recurrent malignancy for a median survival of 60 months (Table 2).

In Group 2 were 20 patients. The tumor was controlled in six of them. Five survived without disease for a median survival of 18 months. One patient died with septicemia without evidences of tumor on postmortem examination. Three died from metastatic disease with the bladder tumor controlled, whereas 11 patients died with bladder recurrence and metastases (Tables 3, 4).

Of the 29 patients in Group 3, the tumor was controlled in 3 patients. All survived without disease for a median survival of 25 months (Tables 5, 6). Two died with metastatic disease — the bladder free of recurrent disease. The remaining patients died with metastases as well as local bladder recurrence.

All of the patients in the series treated definitively were available for follow-up of at least 12 months. The 12 month survival figure was 50 per cent (24/49 patients). At the end of 24 months, the survival figure was 30 per cent (14/47 patients). The 5 year survival was 26 per cent (7/27 patients) (Table 7).

Complications

The complications were defined as mild, moderate, and major. *Mild* complications were cystitis, dysuria, or proctitis persisting for 6 weeks beyond the completion of radiation therapy. In this series, 42 demonstrated "mild" symptoms (Table 8).

Moderate complications included persistent cystitis extending beyond 6 weeks after treatment, persistent proctitis extending 6 weeks beyond treatment, or bladder telangiectasia without severe bleeding. Moderate complications were demonstrated in 9 patients. The past history in 7 of these 9 demonstrated previous major pelvic surgery. One patient had had a major transurethral resection, 5 had had suprapubic cystotomies, and one had had an abdominal perineal resection. The remaining two had nothing in their past history to account for the moderate complication.

Persistent rectal or bladder bleeding, a contracted bladder, ulcerations of the bladder or rectum, fistula formation, or death due to complications of radiation therapy were defined as *major* complications. Three patients of the group exhibited major complications. Ulceration of the bladder was seen in one patient and fistulae occured in two. The fistulous tract developed between the bladder and the abdominal wall in each instance. Each of the 3 patients demonstrating major complications had previous complicating modes of therapy. One patient had a previous suprapubic cystectomy, and the others, previous courses of conventional radiation therapy.

Pre-Operative Radiation Therapy

The need for the evaluation of the place of pre-operative radiation therapy was suggested by Whitmore[3] and Marshall[4] as early as 1960. With this in mind, a group of patients were treated to evaluate the relevancy of this form of treatment for deeply infiltrating, high grade tumors. It was an effort to gain experience with the technic and, perhaps, improve survival figures. Six patients had preoperative supervoltage radiation therapy followed by total cystectomies in 6 to 12 weeks (Table 8). The tumor dose varied from 4,000 rads in 26 elapsed days to 6,000 rads in 39 elapsed days. In each instance the total cystectomy was performed without difficulty, with little increase in the post-operative morbidity and no mortality. Of the 6 patients treated in the pre-operative program, 5 were Group 2 with 4 surviving without disease for a median survival of 48 months. The one patient in Group 3 died 6 months following the operation from metastatic disease.

Discussion

Several significant points were demonstrated by the series of patients treated with supervoltage modalities. The administration of 5-fluorouracil immediately prior to the institution of radiation therapy significantly influenced the course of treatment in an undesired manner. Our conclusion was that a systemic chemotherapeutic agent should be reserved for patients in whom either surgery or irradiation had failed, or where there were systemic manifestations of the disease process.

Previous major surgery, as well as previous courses of conventional radiation therapy, significantly influenced the response to supervoltage radiation therapy. This history led to a significant increase in either "moderate" or "major" complications.

The combination of supervoltage radiation therapy and surgery in the management of carcinoma of the bladder might be considered as a worthwhile procedure in patients with advanced carcinoma of the bladder without distant metastases. The patients for such consideration should be in good general condition with no medical contra-indications to surgery.

Conclusion

1. Patients with carcinoma of the urinary bladder in whom the lesion extends to the lateral pelvic wall, and who are in poor condition, are probably poor candidates for definitive radiation therapy. They would be best handled in a palliative manner. Previous courses of radiation therapy, previous suprapubic bladder surgery, and chemotherapy utilizing 5-fluorouracil immediately prior to treatment complicate the patient's course.

2. Bladder surgery for persistences or recurrences can be done following supervoltage

Table 1.

CARCINOMA OF THE BLADDER — RESULTS OF PALLIATIVE SUPERVOLTAGE RADIOTHERAPY

	Number Cases	Alive Without Disease	Dead With Disease	Median Survival (Months)
Group 1	0	0	0	
Group 2	3	0	3	1 (1–5 mos.)
Group 3	6	1	5	1 (1–57 mos.)

Table 2.

CARCINOMA OF THE BLADDER — SUMMARY OF RESULTS

Group 1

Total Number 5 cases
Curative Therapy 5 cases

	Without Disease
Alive	5
Dead	0
Total	5

Total without disease—5 cases
Further therapy—none

Conclusion:

5 cases controlled by irradiation
5 survivals without disease

Median Survival 60 months (6 to 185 months).

Table 3.

CARCINOMA OF THE BLADDER — SUMMARY OF RESULTS

Group 2

Total Number 20 cases
Curative Therapy 20 cases

	Without Disease	*With Disease*
Alive	5	0
Dead	1	14
Total	6	14

Total without disease—6 cases
Further therapy—none

Table 4.

CARCINOMA OF THE BLADDER — SUMMARY OF RESULTS

Group 2

Conclusion:

6 cases controlled by irradiation
5 survivals without disease

Median Survival

Alive without disease— 18 mos. (2 to 170 mo.)
Dead without disease— 3 mos. (septicemia)
Entire group— 15 mos. (2 to 170 mo.)

Cause of death in 14 cases

Metastases with bladder free 3 cases
Matastases with bladder involvement 11 cases

Table 5.

CARCINOMA OF THE BLADDER — SUMMARY OF RESULTS

Group 3

Total Number 29 cases
Curative Therapy 29 cases

	Without disease	*With disease*
Alive	3	0
Dead	0	26
Total	3	26

Total without disease: 3 cases
Further therapy: none

Table 6.

CARCINOMA OF THE BLADDER — SUMMARY OF RESULTS

Group 3

Conclusion:

3 cases controlled by irradiation
3 survivals without disease

Median Survival

Alive without disease— 25 mos.
Entire Group— 9 mos.

Cause of death in 26 cases

Metastases with bladder free 2 cases
Metastases with bladder involvement 24 cases

Table 7.

CARCINOMA OF THE BLADDER — SUMMARY OF RESULTS

	Number Cases	6 mos.	1 yr.	2 yrs.	5 yrs.
Group 1	5	5/5	4/4	4/4	4/4
Group 2	20	16/20	12/19	7/18	2/8
Group 3	29	23/29	8/26	3/25	1/15
Total	54	44/54	24/49	14/47	7/27
Percentage		81	50	30	26

Table 8.

CARCINOMA OF THE BLADDER — IRRADIATION FOLLOWED BY CYSTECTOMY — SUMMARY OF RESULTS

	Number Cases	Alive Without Disease	Dead With Disease	Median Survival (Months)
Group 1	0	0	0	
Group 2	5	4	1	48
Group 3	1	0	1	6

radiation therapy without significant difficulty.

3. Whether used alone or in combination with radical surgery, supervoltage radiation therapy does offer an advantage in the management of urinary bladder tumors, particularly those of high-grade, deeply invasive type (Group 2). These are the lesions that respond poorly to total cystectomy.

Bibliography

1. Broders, A. C.: Annals of Surgery, 75:574 (May 1922)

2. Rubin, P. and Buran, R.: Radiology, 73:209 (February 1959)

3. Whitmore, W. F. *et al.*: American Journal of Roentgenology, 90:1016 (October 1963)

4. Whitmore, W. F. and Marshall, V. F.: Journal of Urology, 87:853 (August 1962)

230 North Broad Street

LEUKOCYTES IN MYELOGENOUS LEUKEMIA

The time course in the blood of leukocytes labeled in vitro with radioactive diisopropylfluorophosphate was studied in 12 patients with chronic myelogenous leukemia. In relapse leukocyte specific activity (LSA) disappeared slowly; in remission LSA curves approached normal and only a small proportion of LSA disappeared slowly. The level of maturation of the leukocytes was investigated by a leukocyte fractionation technic which excluded immature myeloid cells from leukocyte samples. The influence of extracorpuscular factors upon the pattern of disappearance of LSA was investigated by cross transfusion experiments; LSA curves obtained with in vitro and in vivo labeling were compared. The results suggest that (1) the intravascular lifespan of the *mature* leukemic neutrophil is prolonged in relapse and in remission, (2) intrinsically abnormal leukocytes are sequestered in an extravascular pool but recycling occurs, (3) extracorpuscular factors modify the LSA curves, (4) exchange of leukocytes between intra- and extravascular pools constitute a self-sustaining pool(s).

P. R. Galbraith
Canad Med Assoc J 95:511 (Sept 3) 1966

INSTALLATIONS IN THE TRACHEOBRONCHIAL TREE

Twenty-two patients with chronic productive bronchitis or bronchiectasis were treated by direct instillations of normal sodium chloride solution and *N*-acetylcysteine into the trachea through a percutaneous catheter following a period of conventional routine therapy. The instillation procedure itself, using either normal sodium chloride solution or varying concentrations of *N*-acetylcysteine, did not produce significant change in alveolar gas exchange as reflected by measurement of arterial P_{CO_2} and the alveolar arterial gradient for oxygen during and after the introduction of the medication into the bronchial tree. Studies were carried out after patients had been stabilized, breathing pure oxygen on an intermittent positive pressure breathing machine for 30 minutes. Evaluation of the treatment by pulmonary function test demonstrated significant improvement in overall function following therapy. The technic of tracheobronchial lavage is physiologically benign and overall improvement in pulmonary function can be obtained by this means.

P. N. Paez, M. Masangkay, and B. J. Sproule
Canad Med Assoc J 95:522 (Sept 3) 1966

STATE ACTIVITIES

Trustees' Minutes

November 20, 1966

A regular meeting of the Board of Trustees was held on Sunday, November 20, 1966, at the Executive Offices. For your full information, detailed minutes are on file with the Secretary of your component society. A summary of the significant actions follows:

Dr. Featherston . . . Unanimously adopted the following resolution in tribute to the late Daniel F. Featherston, MSNJ Treasurer:

DANIEL FRANCIS FEATHERSTON, M.D.
1896 — 1966

Whereas, Almighty God has seen fit to summon from our midst our beloved colleague, Daniel Francis Featherston, M.D.; and

Whereas, through his long career Doctor Featherston distinguished himself as a worthy member of the profession of medicine and a servant and benefactor of mankind; and

Whereas, with singular and selfless devotion, he consistently served well the Monmouth County Component Medical Society and The Medical Society of New Jersey, whose Treasurer he was at the time of his death; now therefore be it

RESOLVED, that the Board of Trustees of The Medical Society of New Jersey records its profound grief at his passing; and be it further

RESOLVED, that a copy of this resolution be spread upon the minutes of the Board, and that a further copy, suitably prepared, be presented to Doctor Featherston's bereaved family in token of heartfelt sympathy.

. . . Authorized a memorial contribution to the Medical Student Loan Fund in the amount of $50 in memory of Dr. Featherston.

New Treasurer . . . Named Dr. Samuel J. Lloyd of Trenton, to serve as Treasurer until the 1967 annual meeting—in accordance with Chapter XI, Section 6 of the Bylaws.

New Trustee . . . Appointed Dr. David Eckstein of Trenton to fill Dr. Lloyd's unexpired term on the Board of Trustees (1966-1969), to serve until the 1967 annual meeting.

Medical Defense and Insurance Committee . . . Appointed Dr. Jerome G. Kaufman of Maplewood to fill Dr. Featherston's unexpired term (1964-1967) as a member of the Committee on Medical Defense and Insurance, to serve until the 1967 annual meeting.

Board of Medical Examiners . . . Nominated the following candidates for submission to the Governor to fill Dr. Featherston's unexpired term (1965-1968) on the State Board of Medical Examiners of New Jersey:

Carl N. Ware, M.D., Ocean City
Louis K. Collins, M.D., Glassboro
A. Guy Campo, M.D., Westville

Correction in Minutes . . . Called attention to a typographical error on page 135 of the October 16th minutes: A-780 listed on that page should read A-870.

Blue Cross Homemaker Project . . . Directed that the following information be supplied to all component societies; further directed that those counties which have already endorsed the program be asked to reconsider their position on the basis of the action taken by the Board of Trustees:

Hospital Service Plan of New Jersey made application to the Department of Health, Education, and Welfare, Public Health Service, for a grant to conduct a Blue Cross-Homemaker Home Health Aide demonstration project in Essex, Middlesex, Morris, and Somerset counties. Endorsement of the project has been requested from each of the county societies. The Essex County Medical Society solicited the opinion and advice of the Board before giving endorsement to the project.

In his remarks before the Board, Mr. Hughes reported that these four counties were selected because of their contiguous boundaries and highly industrialized areas and the presence of well-established homemaker agencies which would be available to provide the services. In addition, each of the counties has a high level of Blue Cross coverage, thus providing a stable population basis for estimating the use and costs of the services provided. Mr. Hughes outlined the following objectives of the project: (1) to reduce hospital utilization, (2) to reduce absenteeism in industry, and (3) to obtain data for analysis.

After extended discussion with Mr. Hughes, the Board unanimously concluded that it could not endorse this program — upon motion by Dr. Boylan, seconded by Dr. Kaufman, and carried — because the program involved offers a service that:

(1) Seems to embody duplication of services already being supplied by the Visiting Nurses' Association and the Homemakers' Service;

(2) Places the physician in legal and liability jeopardy by asking him to use personnel not legally permitted to him under the Medical Practice Act;

(3) Will impose upon the attending physician the responsibility for the control of utilization;

(4) Foreshadows an inevitable increase in subscription expenditures for Blue Cross Plan if it is added to its available coverages.

(5) Sets levels of compensation for Health Care Aides at an hourly figure higher than that received by hospital personnel of similar competences, and in consequence might deplete the ranks of present hospital personnel.

AMA House of Delegates . . . Approved for introduction by the New Jersey delegates to the AMA at the clinical session a resolution recommending a revision in the AMA House of Delegates' schedule to allow more time for study, evolution, and preparation of positions concerning matters to, and reports from, reference committees.

Teletype . . . Noted that, in its report to the AMA House, the AMA Board of Trustees will discontinue paying rental for the TWX equipment in state society offices — giving the option of keeping the equipment and paying the rental charge to state societies;

. . . Directed that, in light of this information, the TWX service be discontinued as of January 1, 1967.

Review Committees . . . Directed that the following information be conveyed to the Metropolitan Life Insurance Company, together with an explanation of MSNJ's judicial mechanism, with copies to component societies for their information and reference:

The assistance of MSNJ has been requested by the Metropolitan Life Insurance Company in the implementation of a "Reasonable and Customary Fee Plan" with respect to surgical, delivery, and anesthesia expense which the Metropolitan Life Insurance Company has recently underwritten for the American Can and Continental Can Companies. Metropolitan's contractual liability is limited to the payment of benefits equal to fees charged, only insofar as "those fees are reasonable and are the customary fees of the physician rendering the service."

Metropolitan Life has encouraged the establishment of review committees by medical societies which do not already have them to evaluate the occasional unusual cases in which there is some question regarding either the service rendered or the fee submitted. Metropolitan has taken these steps, it reports, in conjunction with the Health Insurance Association of America and the Health Insurance Council.

Insurance companies have repeatedly been informed of the availability of the judicial mechanism of MSNJ in settling complaints against members. If Metropolitan is solely interested in a review committee, it would best be advised to establish a "Committee on Disputed Claims" similar to that established by Hospital Service Plan and Medical-Surgical Plan of New Jersey. This committee would function as a group, responsible directly to the insurance company. Their services would therefore be compensated by them. The Board further agreed that MSNJ could supply — as it supplies to HSP-MSP — a list of outstanding and experienced physicians, to whom Metropolitan could turn as the need arises.

Medicine and Religion . . . Authorized the attendance of Dr. Jerome G. Kaufman at the AMA Workshop on Medicine and Religion, to be held in Chicago on February 18 and 19.

1967 General Session . . . Approved the scheduling of a general session on Medicare at the 1967 annual meeting, for discussion of the present status and recent developments under Medicare, and to answer questions from the members.

Ob-Gyn Patients . . . Approved the recommendation of the Medical-Hospital Liaison Committee as follows:

Representatives of the New Jersey Hospital Association requested support of MSNJ in encouraging mixing of obstetrical and gynecologic patients in hospitals under strict observance of the recommended criteria. Request was made that MSNJ approve in principle such mixing of patients on the basis of strict conformity to the criteria. It was further suggested that, in granting such approval in principle, MSNJ indicate that the responsibility for the effective implementation of this procedure rests with the local hospital. All of the representatives of MSNJ present agreed to so *recommend* to the Board of Trustees.

Extended Care Facilities . . . Directed that suggestion be made to the State Department of Health that it review the criteria for certification of extended care facilities (under Medicare) to be sure they are not impossible of fulfillment.

Prescription Drugs . . . Adopted the following

recommendations of the Council on Medical Services concerning the labeling of prescription drugs:

(1) That MSNJ declare that frequently it is in the best interest of patients to label prescription containers with the names and strengths of contained drugs; fundamentally the final decision rests with the physician to designate whether the containers should be so labeled.

(2) That the physician's narcotic registration number *not* be imprinted on his prescription forms.

Mental Retardation . . . Adopted the following recommendations of the Special Committee on Mental Health:

(1) That, at this time, a separate (scientific) Section on Mental Retardation *not* be established, but that the subject of mental retardation be given consideration by the Sections on Pediatrics, and Psychiatry and Neurology.

(2) That the Special Committee on Mental Health appoint subcommittees, as necessary, dealing with various problems of mental health — alcoholism, drug addiction, and mental retardation — and report the results of their investigations to the Committee.

Cigarette Exhibits . . . Recorded itself as opposed to convention exhibits at the annual meeting which feature cigarettes.

Audit . . . Directed that the Society's official auditor make a certification of all accounts as of November 20, 1966 in preparation for the assumption of duties by the new Treasurer.

Two New Faces In Journal Office

With the new year, the Publication Committee welcomes two new staff people in the editorial office. Marjorie D'Arcy Treptow becomes editorial secretary and Joseph W. Cookson becomes THE JOURNAL's Advertising Manager.

Mrs. Treptow is an old friend with a new name. Her father, held in affectionate memory by the seniors in our State Society, was a prominent Trenton physician, active in The Medical Society of New Jersey. Marjorie herself has her baccalaureate degree from Beaver College. Until Mr. Treptow stole her from us, Marjorie worked in the State Society office — until 1947, in fact. She was secretary to the Executive Officer and to various committees and boards of our Society. Then, and until 1964, there was time out to raise Katharine and William. And in December 1964, she agreed to help out the New Jersey Society of Internal Medicine, being executive secretary for that society until the fall of 1966, when we persuaded her to come back to her old home — The Medical Society of New Jersey. We needed Marjorie, because Theresa Goeke simply had to devote her full time to being Executive Assistant to the Executive Director of our Society. Terrie was the sparkplug who did much to revamp THE JOURNAL and halt the deficit. She deserves a big "mission accomplished" accolade. Fortunately, Terrie will remain at 315 West State Street, so the Publication Committee can call on her if we need her. THE JOURNAL has been lucky that, in the past quarter of a century, we have had three compent, dependable, and imaginative girls in the office. Marjorie Treptow is going to fill with distinction the roles so well played by Miriam Armstrong and Theresa Goeke in the last two and a half decades.

Joseph W. Cookson has been an advertising representative for our JOURNAL since 1963. However, he is now our advertising manager. Joe is a veteran advertising man. He has long had contacts with our profession (from birth, you might say . . . his father was a pharmacist and his mother a nurse). He is a graduate of the college of arts and sciences at George Washington University. Joe served in China during World War II, and was then retreaded for service in Korea. He is active in veterans' affairs in our area. He has also had graduate training in theology at Princeton (with a MRE degree there) and is Associate Pastor in the congregation of the Reformed Church of America, deeply involved in pastoral counseling services. Joe's wife is in the office with him — when she can get time from bringing up 10-month old Jeffrey, 5-year old David, and 7-year old Ted. Joe has brought a truly professional touch to our advertising program; and whenever ethics and advertising enterprise clash, ethics — with Joe — always come out ahead.

Your Role in Adoption

Many people turn to you, the physicians of our state, for advice and help on adopting children — on placing babies for adoption by others; or on assisting a couple who wish to adopt children. This should be done through an agency approved by the State Department of Institutions and Agencies. Below (listed in alphabetical order) are the agencies so approved. Many of these have certain limitations on their adoption services, and contact should be made directly with the agency concerned for these details.

Associated Catholic Charities
31 Mulberry St.
Newark 07102

Associated Catholic Charities
10 Jackson St.
Paterson 07501

Bethany Christian Home
654 Godwin Ave.
Midland Park 07432

Bureau of Children's Services
163 West Hanover St.
Trenton 08625

Catholic Aid Society
811 Cooper St.
Camden 08102

Catholic Welfare Bureau
47 No. Clinton Ave.
Trenton 08610

Child Service Association
284 Broadway
Newark 07104

Children's Aid Society
142 Munn Ave.
East Orange 07017

Children's Home Society*
929 Parkside Ave.
Trenton 08618

Family and Children's Service
191 Bath Ave.
Long Branch 07740

Family and Children's Society
40 North Ave.
Elizabeth 07203

Family and Children's Society
60 South Fullerton Ave.
Montclair 07042

Goodwill Home
79 Plane St.
Newark 07102

Jewish Counseling Agency
17 Halsey St.
Newark 07102

Jewish Family Service
390 Broadway
Paterson 07501

Jewish Federation
300 Broadway
Camden 08103

Jewish Welfare Council
201 Essex St.
Hackensack 07601

Lutheran Welfare Assn.
79 Nelson Ave.
Jersey City 07307

United Family Society
713 Watchung Ave.
Plainfield 07060

* This agency has local or district offices in several areas of our State.

201st ANNUAL MEETING
THE MEDICAL SOCIETY OF NEW JERSEY
May 13-17, 1967
Haddon Hall, Atlantic City
PROGRAM OUTLINE

Saturday, May 13, 1967

Morning

Registration Opens

Afternoon

Golden Merit Award Presentations
House of Delegates — 1st session to be followed by MSP Discussion

Evening

Nominating Committee

Sunday, May 14, 1967

All Day

Reference Committees

Afternoon

House of Delegates — 2nd session (election) to be followed by
General Session on Present Status and Recent Developments Under Medicare

Evening

Reception for President-Elect

Monday, May 15, 1967

All Day

Exhibits Open (9:00 a.m.-5:00 p.m.)
Motion Picture Theatre

Morning

Scientific Sessions:
- Joint Session on Allergy, Gastroenterology and Proctology, Pediatrics
- Joint Session on Clinical Pathology, Medicine, Rheumatism
- Joint Session on Obstetrics and Gynecology, Urology

Afternoon

Scientific Sessions:
- Joint Session on Anesthesiology, Orthopedic Surgery, Surgery
- Joint Session on Cardiovascular Diseases, Chest Diseases, General Practice
- Joint Session on Ophthalmology, Otolaryngology
- Session on Psychiatry and Neurology

Evening

Annual Dinner-Dance

Tuesday, May 16, 1967

All Day

Exhibits Open (9:00 a.m.-5:00 p.m.)
House of Delegates — 3rd session
Motion Picture Theatre

Morning

Special Scientific Session on Accidental Poisoning

Afternoon

Special Scientific Sessions:
- Differential Diagnosis of Schizophrenic Reactions
- Diabetes Detection

Wednesday, May 17, 1967

Morning

Exhibits Open (9:00 a.m.-12:00 noon)
Motion Picture Theatre
Scientific Sessions:
- Session on Dermatology
- Session on Metabolism

12:00 noon

Registration and Exhibits Close

ANNOUNCEMENTS

Carcinoma of Head and Neck

At the annual Radiology Award Dinner, the Academy of Medicine will present a symposium on "Radiation and Methetrexate Treatment of Squamous-cell Carcinoma of the Head and Neck." The essayist is Dr. Milton Friedman of New York University Hospital. The meeting will be on Wednesday, January 25th, at the Robert Treat Hotel in Newark. The dinner is at 7 p.m. and the lecture at 8 p.m. For further information, contact Dr. Frederick Strauss, 12 Hawthorne Avenue, East Orange, New Jersey.

Cancer Detection and the GP

On Thursday evening, January 26, under sponsorship of the Morris and Essex County Medical Societies, there will be a symposium on the role of the family doctor in cancer detection. This will be held in the Auditorium of the Sandoz Company, in Hanover, N.J. This is on State Highway Number 10, at Ridgedale Avenue. Sandoz Pharmaceuticals is a participant in planning and supporting the meeting. Principal speaker, Emerson Day, M.D., is director of the Strang Clinic.

Eye Conference

The ever-popular Wills Eye Annual Conference will be held February 9, 10 and 11, 1967 at the Bellevue-Stratford in Philadelphia. For details of this unique and practical symposium on ophthalmology, write to Dr. Albert Cleveland, 1601 Spring Garden Street, Philadelphia, Pennsylvania 19130.

Hypnosis Course

This spring, for twelve evenings, a course in medical and dental hypnosis will be given at the Mountainside Hospital in Montclair. It starts on March 1, 1967 and will be held each Wednesday thereafter for 12 consecutive Wednesdays. The last meeting is scheduled for May 17, 1967. This is open to physicians and dentists only, and AGP credit will be given. For more information or for enrollment, write to Dr. Kenneth A. Bartlett at 460 Bloomfield Avenue in Montclair. This is sponsored by the N. J. Society for Clinical Hypnosis.

Medical History Awards

The Hafner Publishing Company offers $200 for an article on the history of medicine, focused on any single individual. Nominations for articles should be submitted to the Welch Medical Library, Johns Hopkins University, 1900 East Monument Street, Baltimore, Maryland 21205.

The $100 Gottlieb Prize for an essay on medical history is also available, and entries should be sent to Mrs. Bernice M. Hetzner, Medical Library, University of Nebraska, 42nd Street and Dewey Avenue, Omaha, Nebraska 68105.

The closing date for the latter is April 15, 1967, and for the Hafner Award it is March 1, 1967.

Case Presentations on Muscle Diseases

On the 2d and 4th Thursdays of each month, a case presentation on muscle diseases is held at Orange Hospital Center—8:45 a.m. the 2d Thursdays; and 6:45 p.m. the 4th Thursdays. For more details and specific schedules, write to Dr. Earl Hoerner, 40 Northfield Road, Livingston.

Contact Lens Course

On Sunday, May 7, and Monday, May 8, an institute and demonstration course in contact lens fitting will be offered under the auspices of the New York Eye and Ear Infirmary in New York City. For details, write to Mrs. Jane Stark, Institute of Ophthalmology, Eye and Ear Infirmary, 218 Second Avenue, New York, New York 10003.

Store Front Clinics

If the people won't come to the clinics, the clinics will come to the people. Such, at least, is the philosophy of the Catholic Medical Center of Brooklyn and Queens in a proposed program to provide total medical services for less prosperous citizens. Clinics are being established in store fronts near where lower income people live. The clinics will be able to do ordinary immediate laboratory work and will have x-ray equipment. The clinics will be open all day and on specified evenings. For further information about this program, write to Jim Gaylord, Carl Byoir & Associates, Inc., 800 Second Avenue, New York 10017.

Mixing Gynecologic Cases in the Maternity Wards

The falling birth rate has left many empty beds on the maternity floors of American hospitals. If these could be used for gynecologic cases, it is estimated that thousands of additional patients could be accommodated without new construction. Many state boards of health are reluctant to authorize this, fearing cross infections.

In the November 1 issue of *Hospitals,* a report is given indicating that hospitals and physicians can adapt their units to this change, permitting intermixture of obstetric and gynecologic patients on the same floors.

For further information write to the American Hospital Association's New York Office, 99 Park Avenue, New York, New York 10016, and ask for the November 1966 study by Commissioner Samuel L. Andelman, M.D.

Movie on Drug Abuse

Suitable for showing to the general public, especially to high school and college students, is the Public Health Service's 16 millimeter film on Drug Abuse: Goof Balls and Bennies. For a free, short-term loan, get in touch with the Audiovisual Facility, Public Health Service, Atlanta, Georgia 30333. The film may be purchased from Precision Laboratories at 21 West 46 St., New York City 10036.

Sight-Saving Puzzle Book

Your aged and myopic patients may enjoy crossword puzzle books put out by Large Print Publications. The oversize puzzle books and the large print make it easy for people of poor vision to use these books. The 54-page puzzle book, complete with answers in the back and several novelty puzzles, is sold for $1 from the Large Print Publications, whose offices are at 11060 Fruitland Drive, North Hollywood, California 91604.

EEG Course

A course in "Clinical Electroencephalography" is offered on June 5, 6, and 7, 1967 in Philadelphia. It is sponsored by the American EEG Society, and is aided by a grant from the U.S. Public Health Service. This course is beamed at physicians who have had little or no formal EEG training. Inquiries about further details and registration procedure should be addressed to Dr. Donald W. Klass, 200 First St., Rochester, Minnesota, 55902.

Self-Quiz in Internal Medicine

Under the auspices of the Cooper Hospital in Camden, there has been prepared a review of current literature from existing journals for the development of multiple choice quiz sheets which will enable the subscriber to test himself. Physicians may subscribe to this service for $10 a year. For more details, or subscriptions, write to W. T. Snagg, M.D., Director of Medical Education, The Cooper Hospital, Camden, New Jersey.

Family Planning Booklet

The United States Department of Health, Education, and Welfare now has made available its "Report on Family Planning," summarizing the Department's activities and policies on fertility, sterility, and family planning. A copy of this 35-page report may be obtained for twenty-five cents from the Government Printing Office, Washington, D.C. 20420.

Film on "Heartbeat"

The Communicable Disease Center of the Public Health Service Audiovisual Facility now has available, for free loan, a 35 or 16 millimeter film in black and white called, "Heartbeat." The film runs twenty-eight minutes. It deals with cardiac surgery and with the variations in heart disease throughout the world. For further information, or for free loan of the film, write to: Communicable Disease Center, Atlanta, Georgia 30333.

Film Catalog

The Public Health Service has revised its catalog of films of interest to the medical profession. The current revision is listed as Public Health Service Publication No. 776, and is available for $1 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The catalog runs for over one hundred big pages and gives a brief summary of the content of each film. There is also an index by subject. The catalog includes order blanks.

Cytology as an Office Procedure

Announcement is made of a cytology tutorial course for obstetricians and gynecologists in the acridine orange staining technic in cytology in office practice. Time as arranged; seven sessions of 3 hours each. Equipment provided. For information call (201) 836-2070, Allan Lazar, M.D., 740 Carroll Place, Teaneck, New Jersey 07666.

OBITUARIES

Dr. Joseph A. Angelo

Dr. Joseph Angelo of Secaucus died on the last day of October in the 66th year of his life. An M.D. from Georgetown (class of 1929), he interned in the Columbus Hospital in New York City. He was a general practitioner, identified with Christ Hospital in Jersey City, where he was an associate in medicine. He was a lieutenant colonel in the Army of the United States from 1942 through 1946, serving in the Pacific theatre. Dr. Angelo was active in the affairs of the North Hudson Physicians' Society, and in committee work for our Hudson County Medical Society.

Dr. George Joseph Epstein

At the untimely age of 58, George Joseph Epstein, a distinguished nothern New Jersey ophthalmologist, died on September 26, 1966. A 1937 graduate of the medical school of Yale University, Dr. Epstein was an Associate Ophthalomolgist at the West Hudson Hospital in Kearny. Dr. Epstein, a diplomate of the American Board of Ophthalmology, had offices in both Kearny and Teaneck.

Dr. H. Richard Mayer

Only 55 years old, Dr. H. R. Mayer died on November 21, 1966 at the Helene Fuld Hospital, Trenton. A 1935 graduate of the old Long Island College Hospital, he did graduate work in ophthalmology and soon acquired a Board diploma in that specialty. When the first bombs fell on Pearl Harbor, he sought an army assignment, and served throughout the war first as a Lieutenant, then as a Captain, then as a Major. He worked for the Veterans Administration for a while in several VA hospitals, and then became chief of otology and ophthalmology at the VA Regional Office in New York. He became Associate Attending Ophthalmologist at the Helene Fuld Hospital and was also actively affiliated with the Hamilton Hospital.

Dr. Archibald R. Saporito

On September 9, 1966, the long and busy life of Dr. Archibald Richard Saporito came to an end. Born in 1895, he was affiliated with both the Columbus Hospital in Newark and the West Hudson Hospital in Kearny. Dr. Saporito earned his M.D. at the University of Maryland in 1922. He had special interests and skills in industrial medicine and surgery, and was active in the Academy of Medicine of New Jersey.

BOOK REVIEWS

Questions and Answers in Orthopedics. F. C. Goodman, M.D. and George Schoedinger, M.D. St. Louis, 1966, Mosby. Pp. 244. ($9.85)

Here is an excellent aid for anyone preparing for an examination or attempting to become more knowledgeable in orthopedics. If used as intended, the reader will be constantly referring to the references and thus become more familiar with the literature and deepen his knowledge of orthopedics.

The authors have drawn upon the testing methods of the American Academy of Orthopedic Surgeons and the American Board of Orthopedic Surgery. They have catalogued them in groups and patterned their questions in the manner used by these two organizations. Goodman and Schoedinger should be commended for the compilation of such an excellent group of questions. They deserve much credit for developing so voluminous and substantial a bibliography. This is a book which should be in the hands of everyone preparing to practice or to teach orthopedics.

CHARLES I. NADEL, M.D.

Operable Heart Disease. Howard D. Sirak, M.D. C.V. Mosby Co., St. Louis, 1966. Pp. 130. (Illustrated) ($12.50)

Here is a guidebook for students, interns, and residents whose medical journeying leads them into the realm of cardiac surgery. It includes numerous drawings of cardic defects with superimposed cardiac catheterization. This design certainly enhances the reader's understanding of the effects of the defect and the meaning of the data. The x-ray reproductions are well done. Dr. Sirak has taken great pains to spell out in some detail the pathophysiology of the various lesions.

The title of this book is misleading. It is a guide to operable diseases of the heart, but the author has completely neglected several areas which deserve some mention: specifically, the procedures available in arteriosclerotic heart disease, constrictive pericarditis, and the treatment of traumatic wounds of the heart. Unfortuntely, his text on the preoperative management of the patient with heart disease is limited to three paragraphs, leading the reader to suspect that the author relies pretty heavily on preoperative *medical* management. Of course, this doesn't help the reader much since he is relying on the author for guidance. Nor is there any mention in the book of problems induced by hypothermia. The discussion of postoperative hemorrhage fails even to mention afibrinogenemia.

As a manual for medical students, interns, and residents without prior knowledge of the subject, this is a well organized book with good diagrams and x-ray reproductions and a considerable supply of useful facts. But it is not a definitive text on operable heart disease, which its title implies. It is regrettable that the author limited the scope of the book to congenital and rheumatic heart disease, to the neglect of arteriosclerosis and trauma.

WILLIAM A. DWYER, JR., M.D.

The Doctors*. Martin L. Gross. New York, 1966, Random House. Pp. 605 ($6.95)

"The doctor," writes Mr. Gross, "has become one of the major causes of contemporary death and illness: the unseemly carrier of doctor-caused or iatrogenic illness." In this somewhat blood-thirsty cannonade, the author charges the medical profession with incompetence, arrogance, greed, laziness, and self-satisfaction. "The declining prestige of the American physician," he writes, "is the result of a shift in the doctor himself. From a societal leader, he has changed into a man of mediocre intellect, trade school mentality, limited interests, and incomplete personality." Mr. Gross spares neither our professional careers nor our private lives. The doctor's private life, he suggests, "is one of passionate leisure . . . a conspicuously affluent personal life, which feeds the pretentious and avoids the intellectual. The modern physician is too often a leader of upper middle class tastes, of non-intellectualism, of showy habits, and of country club mentality. . . . More than any other class, doctors wallow in living big."

Doctors in all fields are the butt of Mr. Gross's venom. The pediatrician he sees as a glorified baby sitter. Laryngologists are practitioners of "pediacide," because "tonsillectomy takes as many lives as many nationally publicized diseases." University based physicians are too lacking in compassion. As for obstetricians, well "pregnant women given hormone treatment have seen their female children born with male genitalia." The GP is swiftly dismissed: "The present general practitioner," Mr. Gross tells us, "in typical private practice is pitifully trained. . . . His training usually consists entirely of medical school and a year as a confused intern."

Certainly, some counts in his indictment are true, and maybe it does us good to be needled this way. It is certainly doing well for Mr. Gross. What with magazine articles, TV appearances, and book royalties, the author, too, will soon be riding in the iatrogenic Cadillac which he begrudges the doctors.

HENRY A. DAVIDSON, M.D.

Pulmonary Diseases and Anomalies of Infancy and Childhood. Milton I. Levine, M.D. and Armond V. Mascia, M.D. New York, 1966, Harper & Row. Pp. 368. 148 illustrations. ($12.00)

In a clear and concise manner, Levine and Mascia have offered a good review of pediatric pulmonary diseases exclusively. Written primarily for medical students, general practitioners, and pediatricians, the text is also useful to radiologists, chest surgeons, and allergists. The excellent bibliography at the end of each chapter enables the reader to enhance his knowledge of the problem that interests him—especially controversial ones. The authors offer an excellent classification of conditions pertaining to the text prior to each chapter. This will be valuable differential diagnosis. However, oversimplification of treatment takes away from the completeness of the book. Technically the volume is handsomely bound, the print clear, and over one hundred illustrations (mostly roentgenograms) appear.

This unique book covers a pediatric subject meaningfully and usefully.

FRANK C. VANORE, M.D.

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* For further comment on this book, see the "Gross Exaggerations of Martin Gross," page 2.

Alcoholism. Edited by J. H. Mendlson, M.D. Boston 1966, Little Brown. Pp. 260 (Price not stated).

Here is no dry and moldy treatise. It is the work of thirteen leaders who air old concepts and formulate new ones. Explanations are clear and concise and not slanted toward any particular discipline. Cultural, social, medical, psychologic, and legal aspects are appraised and make evident that the control of alcoholism is a responsibility to be shared by all. Medical men, especially those who refuse to get involved in this problem, often consider the alcoholic hopeless, morally weak, and not at all ill. Let them read this book! Reasons for this negative attitude (valid and invalid) are thoroughly evaluated. The mind-body dichotomy (is alcoholism organically or psychologically induced?) is carefully dissected and studied.

Advances in science have been made possible by systematic investigations in the experimental laboratory. Hypotheses such as "alcohol is consumed to avoid or reduce aversive contingencies," or "is alcoholism perpetuated by ill defined reward factors," can now be tested by laboratory methods. Results obtained in this manner have so far answered these questions in the affirmative and are reliable. Statistically derived explanations are less dependable unless the numerical evidence is overwhelming. For instance, statistical support is given to the view that there is less alcoholism in cultures that prescribe alcohol than proscribe it. An individual who is not forbidden to drink (but who has learned its dangers as well as its questionable virtues) is less likely to become addicted.

The analogy between alcoholism and an infectious disease which requires a host, an agent, and an environment is inviting and apparently logical. However, the treatment is different. Infectious disease is treated by increasing the host's resistance, providing a more healthful environment, and by destruction or eradication of the agent. The first two meansures are certainly applicable but the last is hardly tenable, as witness the Volstead Act. This is a fresh, unusual, and highly readable book.

THEODORE A. ANDERSON, M.D.

Ocular Pharmacology. William Havener, M.D. St. Louis, 1966, Mosby. Pp. 456 with 198 illustrations. ($21.75)

Within the past two years, an upsurge of texts on ocular therapeutics has signaled the dynamic changes taking place in the ophthalmic armamentarium. Improved diagnostic methods have led to better understanding of disease processes. Many new drugs have become available for general clinical use. Here Havener has compiled a text covering every phase of treatment. This is based on sound judgement rather than on the familiar cookbook approach. The new drugs are thoroughly discussed, and some old faithfuls are exposed and discredited.

Routes of administration have a special meaning to the ophthalmologist, as the approach is so often of a local nature depending on the choice of vehicle. The treating physician will feel better prepared after reading this chapter and less baffled by the advertising claims of different vehicles for medications commonly manufactured.

Alpha-chymotrypsin (commonly used in cataract surgery) is evaluated from every standpoint. Its widespread use in the past few years has caused some consternation about the complications of glaucoma, keratopathy, retinal changes, and wound rupture.

The chapters on anesthesia, the use of antibiotics, antiviral drugs, autonomic drugs, and corticosteroid therapy are complete, well organized, and certainly will serve as a reference for more effective treatment.

The final chapters dealing with the osmotic agents, vitamins, and aqueous secretion inhibitors add to the completeness of this text.

This is the most complete text of its type available. Careful study and frequent reference will promote scientifically rational use of preferred medications and discourage inappropriately applied methods of treatment. Every ophthalmologist and resident ophthalmologist will find this text of great value.

H. M. EISENSTODT, M.D.

Medical Education: The Queen's-Rutgers Experience 1792 to 1830. David L. Cowen. New Brunswick, 1966, The Rutgers Medical School. Pp. 54. Illustrated. (Free upon request)

Continuity in educational institutions is often more apparent than real. In this resumé of activities of several beginning-of-the-nineteenth-century worthies, Cowen presents a dreary picture of the beginning of the College of Physicians and Surgeons of Columbia University and some less fortunate ventures, among them those of Queen's College, later to become Rutgers University. The present Rutgers Medical School is the fourth attempt to establish a professional medical faculty under the aegis of that group. The first three efforts (the last failed in 1830) all came to grief because of economic and legal difficulties, although Cowen also blames Hosack for some of Rutgers' troubles.

This little pamphlet is a timely reminder of the manner in which practical considerations undo elaborate plans. Both medical colleges now operating in New Jersey face a continuation of the dilemma, between the horns of which the early Rutgers experiences collapsed: the issue of whether the teacher of medicine is to have time available to teach and the leisure to think about the best ways to teach. In 1800, the problem was how to stay alive by supplementing income from fees from teaching by practicing. Today, it is how much time the clinical teacher will have to devote to insurance-remunerated cases in order to earn enough money for the hospital-medical school complex to pay this back to him in the form of a salary. *Plus ça change, plus c'est la même chose!*

FRED A. METTLER, M.D.

Recreation and Socialization for the Brain Injured Child. Edited by Sol Gordon, Ph.D. and Risa S. Golob, M.A. Published 1966 by the N.J. Association for Brain Injured Children, 61 Lincoln Street, East Orange, N.J. Pp. 110. Paperback. ($2.00)

A practical manual is here offered for parents and practitioners concerned with fitting brain-injured children into the mainstream of life. There is "how to do it" material on swimming, motor training, school settings, overall recreation, socializing activities, camp life, and parent counseling. It is a hopeful, useful, and gallant work. The book concludes with a list of available resources, a roster of interested organizations, and a bibliography of 50 references to the literature.

RALPH N. SHAPIRO, M.D.

ABSTRACTS

ON TUBERCULOSIS AND OTHER RESPIRATORY DISEASES. ISSUED BY THE NATIONAL TUBERCULOSIS ASSOCIATION

JANUARY, 1967 • VOL. XL, NO. 1

OPPORTUNISTIC PULMONARY INFECTIONS

Diabetes mellitus is one of the principal diseases predisposing to infections of the lung by unusual organisms, particularly fungi, which are on the increase. Representatives of various disciplines discussed the problem at a recent interdepartmental conference at UCLA.

Opportunistic infections may be extremely complex clinically because they represent the interaction of infection with a variety of unusual organisms superimposed on a variable underlying disease. There is definite evidence that the prevalence of opportunistic pulmonary infections is increasing. Fungus and other disorders that are commonly involved will be considered in particular here.

Diseases notorious for predisposing to opportunistic infections are diabetes mellitus, leukemia, lymphoma, cancer, and aplastic anemia. Concomitants of these disorders such as quantitative and qualitative protein deficiencies and granulocytopenia also have been shown to potentiate and predispose to multiple infections. Perhaps of greater importance is the modification of the patient's ability to resist infection by X-ray therapy, steroids, and a variety of anti-neoplastic drugs and antibiotics. In addition, the deliberate suppression of immunity to favor transplanted organ survival has introduced a variety of remarkable infections.

Host Resistance Factors

Of the mechanisms that have been suspected as bearing on overt disease when it occurs, either opportunistically or in ailments not ordinarily considered opportunistic, the first major line of defense is the skin. The next is the system of mucosal surfaces and their secretions. The third is the system of cells and tissues comprising the reticuloendothelial system.

The reticuloendothelial system is influenced by a fourth, the pituitary-adrenal system which, chiefly through the corticosteroids, influences mechanisms important in predisposing to infection. In view of the relationship among the thymus, the spleen, and the entire antibody-producing system, corticoid-induced impairment of specific antibody response and other immunosuppressive drugs might be expected to play a key role in opportunistic infections.

Pneumocytis, Cytomegalovirus

These two "pediatric" diseases are being seen more frequently in debilitated adults who come to resemble infants immunologically.

Pneumocystis carinii pneumonia usually occurs in infants between six weeks and six months of age. The infants are debilitated, have a disease such as diarrhea, hypogammaglobulinemia, or leukemia, or have received steroid or immunosuppressive therapy. Dyspnea is accompanied by cyanosis, intercostal retraction, and sometimes periods of dry cough. Roentgenograms show a bilateral bronchopneumonia with generalized, localized, and interstitial emphysema.

The organism has not been classified with certainty. Some regard it as a protozoan, others as a yeast-like fungus. Attempts should

JOHN F. MURRAY, M.D.; HUGH F. HAEGELIN, M.D.; WILLAM L. HEWITT, M.D.; HARRISON LATTA, M.D.; DAVID MCVICKAR, M.D.; A. F. RASMUSSEN, JR., M.D.; and LEO G. RIGLER, M.D., *Annals of Internal Medicine*, September, 1966.

be made to diagnose the infection during life since effective treatment (pentamidine isothionate) is available.

Cytomegalic inclusion disease, or salivary gland virus disease, may appear as an overwhelming congenital or neonatal infection; an inapparent infection, especially of the salivary glands; a secondary infection in older children and adults with leukemia, lymphoma, renal transplantation, or some chronic debilitating disease; or, rarely, as a localized granuloma involving the gastrointestinal tract or a bronchus.

The virus is a DNA virus of the herpes group. The nuclear inclusion may develop in three to five days and contains a DNA core surrounded by a single layer or capsule of viral specific protein. When it passes into the cytoplasm it acquires a second outer coat.

Nocardiosis and Aspergillosis

Nocardiosis and aspergillosis demonstrate some of the perplexing clinical problems in the spectrum of the opportunistic fungus infections. They may be the sole cause of death in patients whose underlying disease is well controlled and not life-threatening. However, effective therapy is available for both infections but early diagnosis is essential.

Nocardiosis and aspergillosis are rarely primary infections. Under favorable clinical circumstances both organisms may have enhanced virulence and produce severe infections, mostly involving the lungs.

The secondary variety of nocardiosis, like the primary, usually begins in the lungs, is locally invasive, and commonly spreads to the central nervous system when extrapulmonary dissemination occurs.

Sulfonamides are the most effective chemotherapeutic agents in the treatment of nocardiosis. In seriously ill patients, it would seem prudent also to give an additional drug such as tetracycline.

The diagnosis of aspergillosis is more tenuous than that of nocardiosis when based on the isolation of the causative organisms in the laboratory since *Aspergillus* is a frequent contaminant. All three varieties of secondary aspergillosis (localized, invasive, and disseminated) are being seen with increasing frequency, and usually involve the lung.

Although the prognosis in secondary aspergillosis is usually dictated by the underlying disease, all patients with significant signs and symptoms of active infection should be treated with amphotericin B. Pulmonary mycetomas are best treated by resection, and the use of amphotericin B for pre- and postoperative coverage should be considered.

Mucormycosis and Candidiasis

Pulmonary candidiasis takes two forms. One is a mild recurrent bronchopulmonary infection with persistent cough and sputum containing large numbers of budding yeast cells and pseudomycelia. More extensive disease may appear radiologically as pneumonia with consolidation and varying degrees of pleural reaction or as a miliary type of pulmonary infiltration consistent with blood stream dissemination.

The fungus responsible for mucormycosis occurs widely in soil. The possibility of a mycosis, particularly mucormycosis, should be considered in any instance of inflammatory disease involving the paranasal sinuses or orbit, especially in a patient with uncontrolled diabetes mellitus. In patients with leukemia or lymphoma, mucormycosis tends to involve the lungs rather than the nasopharynx.

Control of the underlying disease remains the most important factor for improvement in these infections.

New Jersey Tuberculosis and Health Association
15 East Kinney Street, Newark, New Jersey 07102

WHY–

AFTER NEARLY 6 YEARS OF HOLDING THE LINE

NEW JERSEY BLUE SHIELD HAS TO HAVE A RATE INCREASE

Medical-Surgical Plan of New Jersey—which has not increased its rates in nearly six years—finally had to ask the Commissioner of Banking and Insurance for a premium increase under its basic Subscription Certificate.
Hospital Service Plan of New Jersey—our companion Blue Cross Plan—is not involved in the rate rise.

This is only the fourth rate increase sought by Blue Shield in over 24 years, since the Plan was founded. It will not affect the rates of extended benefit Riders, Medicare Complementary Programs for members aged 65 or over, Student Program, or special contracts, such as State and Federal Employee Programs, and experience-rated national accounts, which are currently rated, paying as they go on the basis of usage experienced by the group.
While Blue Shield has been holding the line on rates since 1961, several things have been happening.

People Have More Coverage. In the past 6 years, new benefits have been added to Blue Shield coverage . . . such as routine care of healthy newborn children, and various types of dental surgery in the hospital. Other benefits have been broadened to keep pace with medical advancement, for instance, introduction of an open heart surgery "package," and increased coverage of accidental injury treatment outside the hospital. Not one penny of additional premium has been charged for these.

People Are Making More Use of Their Coverage. Members' use of their Blue Shield protection has been going up, every year. In 1965 the number of cases paid, per thousand members, was 14% higher than in 1961. This has cost Blue Shield more, in dollars paid out in benefits per average member.

The Economy Has Been Spiralling Upward. No one needs to be reminded that the cost of virtually everything has gone up since 1961 . . . except the cost of Blue Shield protection. Even a non-profit organization has an operating overhead . . . though Blue Shield's is only 8.8% . . . and the Plan has had to pay more for its goods and services over the last five years, as well as paying more adequately for services rendered to members. Meanwhile, people have continued to pay the same rates for Blue Shield protection . . . protection that has been periodically upgraded.

Doctors' Services Are More Adequately Compensated. Until last year, there had been no general increase in Blue Shield allowances for doctors' services for seven years. Blue Shield fees fell behind those of neighboring non-profit plans, as well as the general medical economy. The Plan could not expect its Participating Doctors to continue accepting substandard payments and still extend Blue Shield's valuable paid-in-full service benefits to qualified members. Consequently, overdue adjustments were made in the fee schedule on October 1, 1965, which not only benefit subscribers who qualify for service benefits . . . by encouraging continued wide participation by doctors . . . but which also help subscribers in the higher income levels, by paying a larger portion of their medical bills.

What It All Adds Up To:

The simple economic fact is this: You can't pay out more than you take in.

Blue Shield has been forced to do this for some time, under existing rates.

It has been able to do so only by using up its reserves—funds used to pay benefits when payments exceed premium income.

But as of October 1, Blue Shield's reserves were just about exhausted—reduced to the equivalent of less than one day's operations.

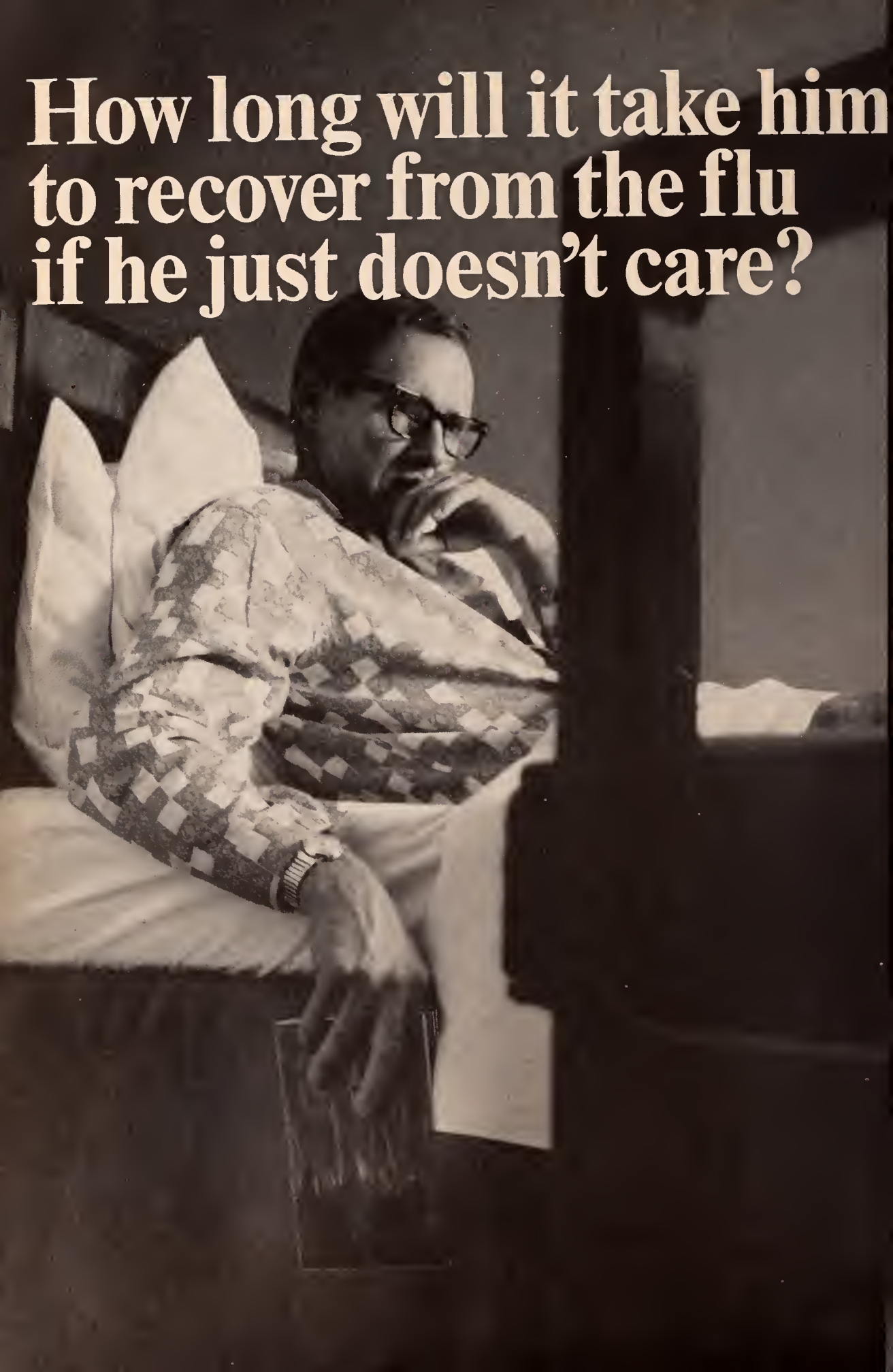
These are the reasons why Blue Shield had to have a rate increase.

It could not continue to provide today's—and tomorrow's—protection at 1961 prices.

BLUE SHIELD ®
MEDICAL-SURGICAL PLAN OF NEW JERSEY
500 Broad Street, Newark

NEWARK **TRENTON** **CAMDEN** **MORRISTOWN**

How long will it take him to recover from the flu if he just doesn't care?



Does he really care?
s he alert, encouraged,
ositive and optimistic
bout getting out of bed
nd back to work soon?
Or is he giving in to
ıe depressing impact
f confinement?
When functional fatigue
ɔmplicates convalescence,
lertonic can help...

Pleasant-tasting Alertonic is pipradrol hydrochloride—an effective cerebral stimulant whose gentle analeptic action helps counteract the apathy and inertia that so often delay convalescence—together with an excellent vitamin and mineral formula, in a satisfying 15% alcohol vehicle.

Nothing fosters confidence and a sense of well-being better than your own personal warmth, understanding and encouragement together with Alertonic to help insure prompt response.

Adequate dosage is important: Prescribe Alertonic—one tablespoonful t.i.d., 30 minutes before meals...tastes best chilled.
And for your patient's sake, prescribe Alertonic in the convenient, economical one-pint bottle.

Alertonic®

Available Only On Prescription

Each 45 cc. (3 tablespoonfuls) contains: alcohol, 15%; pipradrol hydrochloride, 2 mg.; thiamine hydrochloride (vitamin B_1) (10 MDR*), 10 mg.; riboflavin (vitamin B_2) (4 MDR), 5 mg.; pyridoxine hydrochloride (vitamin B_6), 1 mg.; niacinamide (5 MDR), 50 mg.; choline,† 100 mg.; inositol,† 100 mg.; calcium glycerophosphate, 100 mg. (supplies 2% MDR for calcium and for phosphorus) and 1 mg. each of the following: cobalt (as chloride), manganese (as sulfate), magnesium (as acetate), zinc (as acetate), and molybdenum (as ammonium molybdate).

*Multiple of adult Minimum Daily Requirement supplied.
†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing life experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

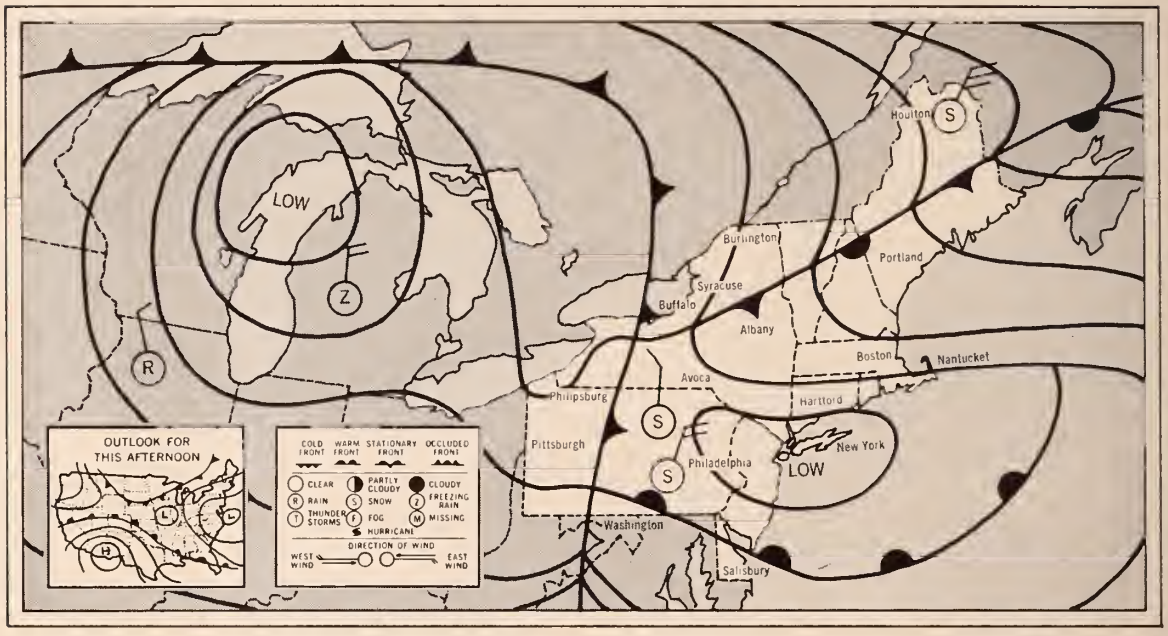
Merrell

THE WM. S. MERRELL COMPANY
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

6-7907

REGIONAL WEATHER FORECAST

High Winds, Snow Storms and Much Colder Followed by Cough, Stuffed and Runny Noses and Aches and Pains.



Tussagesic breaks up coughs, quickly clears stuffed and runny noses and relieves aches and pains. Provide coverage of the tough cold for up to 24 hours with just a single timed-release tablet dosed morning, midafternoon and at bedtime.

each

Tussagesic®

timed-release tablet contains:

Triaminic® ..... (phenylpropanolamine hydrochloride 25 mg., pheniramine maleate 12.5 mg., pyrilamine maleate 12.5 mg.)	50 mg.
Dextromethorphan hydrobromide	30 mg.
Terpin hydrate	180 mg.
Acetaminophen	325 mg.

Dosage: Adults—1 tablet, swallowed whole to preserve timed-release feature, in morning, midafternoon and at bedtime. *Side effects:* Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. *Precautions:* The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

DORSEY LABORATORIES • *a division of The Wander Company* • **LINCOLN, NEBRASKA**

"Take a laxative" is a harsh sentence

Although there are more than 50 ethical laxatives available for the constipated patient many, unfortunately, do not really produce an effect much like a normal bowel movement. Instead they irritate the bowel, torment it and leave it inflamed, inflamed and distressed.

On the other hand, Dulcolax

Dulcolax (sodium bisacodyl) tablets (5 mg.)

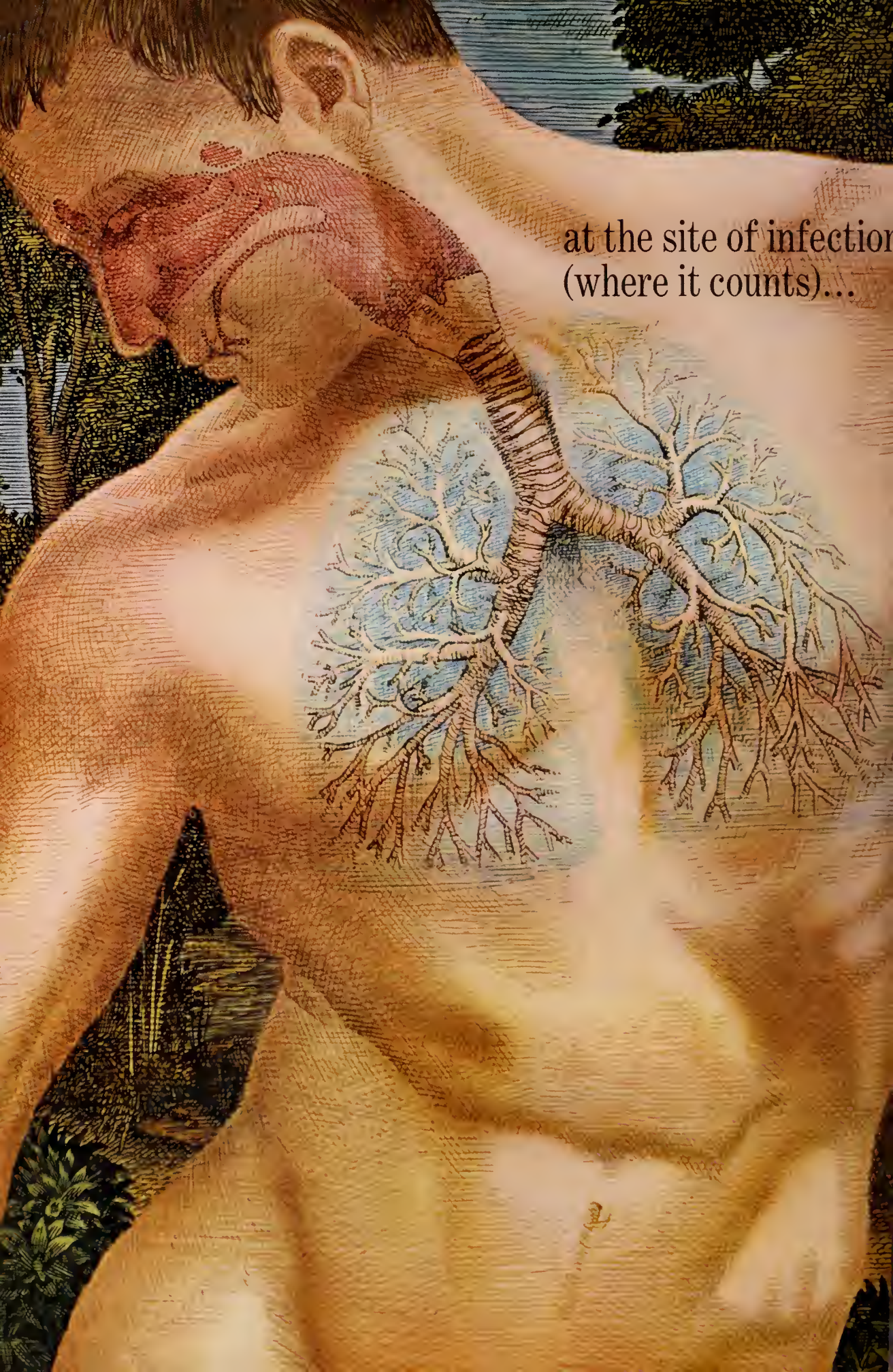
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Geigy Pharmaceuticals Division of Geigy Chemical Corporation Ardsley, New York

Dulcolax®

a gentle persuasion

Geigy


at the site of infection
(where it counts)...

Ilosone® provides more antibacterial activity than any other oral erythromycin

Acid stable, better absorbed ... Ilosone produces faster, higher, more prolonged blood levels, even in the presence of food[1-3]

Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.[1,2] Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.[1,3]

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

700121

Ilosone®
Erythromycin Estolate

Lilly

(See next page for prescribing information.)

Ilosone®/the most active oral form of erythromycin

Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci on culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone.

Contraindications: Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with preexisting liver disease or dysfunction.

Side-Effects: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have appeared in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly if the drug is readministered to sensitive patients, usually within forty-eight hours. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to be definitely related to use of the drug, laboratory findings characterized by increased direct-reacting bilirubin, ele alkaline phosphatase levels, negative or weakly positive cep flocculation and thymol turbidity tests, elevated serum glu oxalacetic transaminase levels, peripheral eosinophilia, and mal cholecystograms.

Individual idiosyncrasy seems evident since jaundice ha been reported in other patients taking prolonged courses o medication. Patients with chronic infection have been give to 2 Gm. of the drug daily for periods of two to six months patients with rheumatic fever have taken prophylactic do 0.5 Gm. daily for two years without difficulty. In one gro 144 patients who received the drug daily for two years, no dice was noted. It was of interest that members of six of patients' families, who were not taking the drug, had epi of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels determined in a group of fifty-four adults and children wh 250 mg. of Ilosone daily for an average of sixteen mont rheumatic fever prophylaxis. The results were compared those of a similar group of forty-four patients who receive icillin. There were no cases of jaundice in either group. Ele of SGPT and serum alkaline phosphatase levels during the of treatment was observed in one patient treated with I and in two patients treated with penicillin. Seven other pa in the group receiving Ilosone and four others in the pen group showed elevations in one of the tests at some time administration of the drugs.

Very satisfactory therapeutic results, without toxicity reported in 102 pediatric patients who received short-term day) courses of Ilosone in the treatment of streptococcus tions. Results of liver function tests in these patients wer parable to those in a similar control group who had re penicillin.

Gastro-intestinal disturbances not associated with hep fects are observed in a small proportion of individuals as a of a local stimulating effect of the medication on the alim tract; however, the normal intestinal gram-negative ba flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with t of erythromycin, there have been occasional reports of urt skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orall
Ilosone Pulvules®
Ilosone Chewable Tablets
Ilosone Drops
Ilosone, 125, for Oral Suspension

For infants and for children under twenty-five pounds weight, the usual dosage is 5 mg. per pound every six hou children twenty-five to fifty pounds, 125 mg. every six (Tablets Ilosone Chewable should be chewed or crush swallowed with water.)

For adults and for children over fifty pounds, the usual of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythr therapy should be considered.

In the treatment of syphilis, the recommended total d 20 to 30 Gm. given in divided doses for a period of ten to days. Close follow-up of the patient is necessary since mycin drugs have not had adequate evaluation in all st syphilis. Examinations of spinal fluid are recommended of the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four d recommended. In the treatment of gonorrhea, patients suspected lesion of syphilis should have a dark-field exam before receiving antibiotics, and monthly serologic tests be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and (equivalent to base), in bottles of 24 and 100.

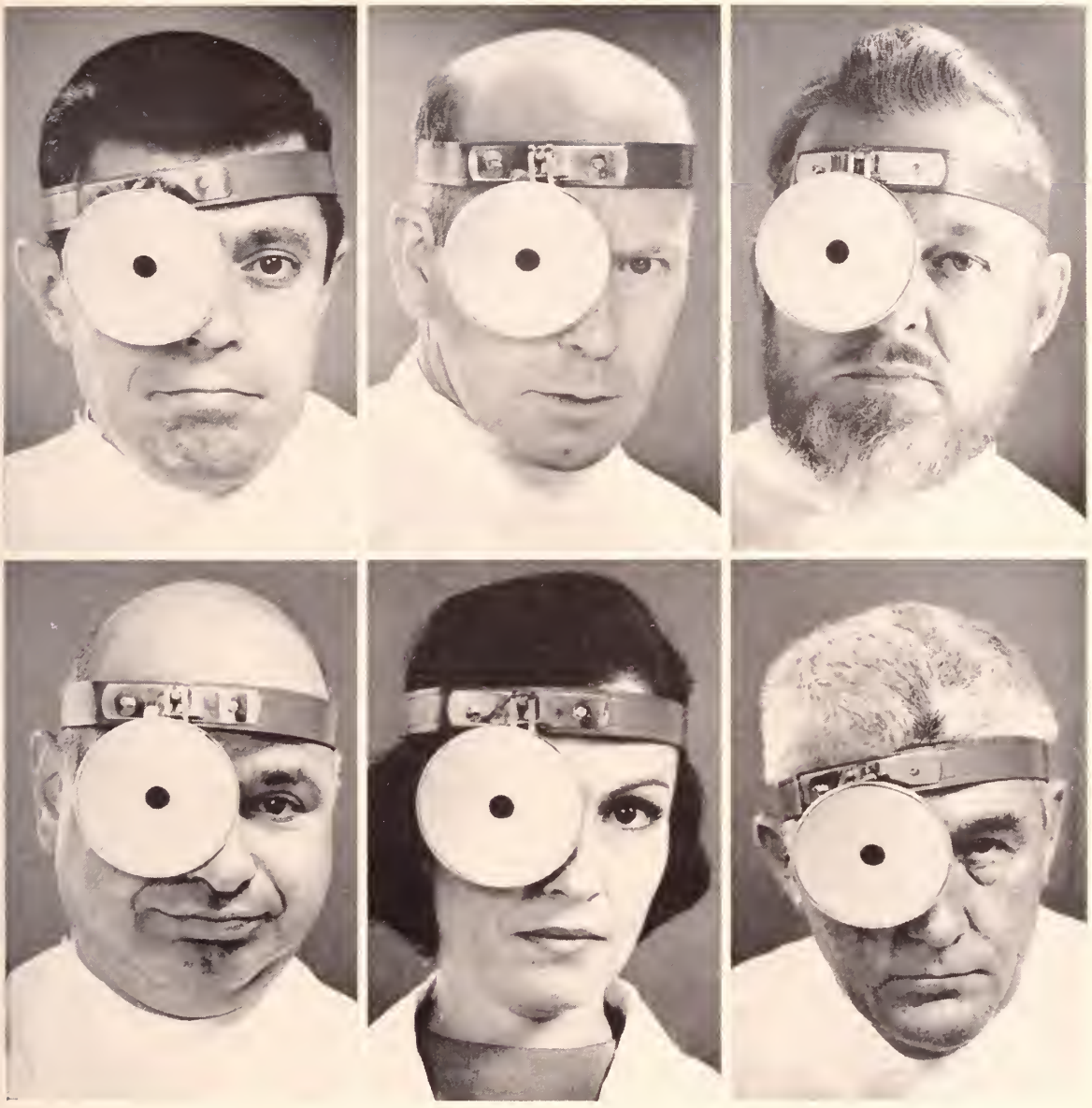
Tablets Ilosone Chewable, N.F., 125 mg. (equivalent t in bottles of 50.

Ilosone Drops, 5 mg. (equivalent to base) per drop, i size packages, with dropper calibrated at 25 and 50 mg

Ilosone, 125, for Oral Suspension, N.F., 125 mg. (eq to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size pa

References: 1. Griffith, R. S., and Black, H. R.: Am. J. M. Sc., *24*
2. Griffith, R. S., and Black, H. R.: Antibiotics & Chemother., *12*
3. Hirsch, H. A., Pryles, C. V., and Finland, M.: Am. J. M. Sc., *239*:19

Additional information available to physicians upon request.
Eli Lilly and Company, Indianapolis, Indiana 46206.



"All Otolaryngologists are Alike"

Just look at them and you can see how much they have in common. Besides, they all go through pretty much the same training, and pass the same kinds of tests, and measure up to the same sort of standards. Therefore, all otolaryngologists are alike. Right?

Wrong! But that's no more preposterous than what some people say about aspirin. Namely: since all aspirin is at least supposed to come up to certain required standards, then all aspirin tablets must be alike.

Bayer's standards are far more exacting. In fact, there are at least nine *specific differences* involving moisture content, purity, potency and speed of tablet disintegration, which make the manufacture of Bayer® Aspirin so different.

These Bayer standards result in significant product benefits, including gentleness to the stomach and product stability, that enable Bayer Aspirin tablets to *stay* strong and gentle until they are taken.

So next time you hear someone say that *all* aspirin tablets are alike, you can say, with confidence, that "it just isn't so."

You might also say that all otolaryngologists aren't alike, either.






Let's get
down to earth
about
diuretics

With Hygroton, you'll discover that you can almost always use fewer tablets than is possible with other diuretics.

You may be told that a new short-acting diuretic was found more effective than Hygroton in congestive heart failure—but this was when twice the manufacturer's maximum recommended dose was given.* At the maximum recommended dose for both diuretics, two tablets of Hygroton were far and away more effective than five tablets of the other diuretic in producing natruresis and weight loss. And at these dosages, Hygroton costs only ⅓ as much as the other diuretic.

Since the discovery of chlorothiazide, the trend has been away from short-acting, multiple-dose, high-cost diuretics. With Hygroton you can usually do the job with just one tablet a day, or every other day.

More than any of the newer diuretics, Hygroton brings dosage and cost of medication down to earth.

*Brest, A. N., et al.:J. New Drugs 5:329, 1965.

Hygroton®
chlorthalidone

Indications: Hypertension and many types of edema involving retention of salt and water. **Contraindications:** Hypersensitivity and most cases of severe renal or hepatic disease. **Warning:** With administration of enteric-coated potassium supplements, the possibility of small bowel lesions should be kept in mind. **Precautions:** Reduce dosage of concomitant antihypertensive agents by at least one-half. Discontinue if the BUN rises or liver dysfunction is aggravated. Electrolyte imbalance and potassium depletion may occur; take special care in cirrhosis or severe ischemic heart disease, and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. **Side Effects:** Dizziness, weakness, nausea, vomiting, hyperglycemia, hyperuricemia, headache, muscle cramps, postural hypotension, constipation, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin reactions, including urticaria and purpura, epigastric pain, or G.I. symptoms after prolonged administration. **Average Dosage:** One tablet (100 mg.) with breakfast daily or every other day. **Availability:** Tablets of 100 mg. in bottles of 100 and 1000. For full details, see the complete prescribing information. 6524-V(B)

HY-4733

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation, Ardsley, New York

Geigy

Not Just "Milk" But . . .

WALKER-GORDON CERTIFIED MILKS

There are many reasons why thousands of discriminating families have been raised from infancy on Walker-Gordon Certified Milks. Among the reasons:

- *Super-Sanitary Production Methods.* From cow to bottle, milk is never exposed to air or human touch.
- *Cleanest.* Lowest bacteria count. Laboratory on the farm.
- *Freshest.* Bottled immediately after milking, usually delivered the following day. Keeps for weeks under normal refrigeration.
- *Uniform.* No variance in flavor or nutritional value, 365 days a year.

Guaranteed Free of Antibiotic Residue

Certified Milks available through Leading Milk Dealers: Raw, Pasteurized, Homogenized-Vitamin D, Skimmed, Acidophilus, Fresh Lo-Sodium. Write for complete information.

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SUMMIT, NEW JERSEY

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AN 85 BED INTENSIVE TREATMENT PSYCHIATRIC UNIT

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The Joint Commission on Accreditation of Hospitals
The Central Inspection Board, American Psychiatric Assn.







New from Du Pont

Symmetrel®

(Amantadine HCl)

ıe first oral chemical virostat for the prevention of influenza A_2



Influenza virus
Protein shell enclosing the core of nucleic acid (RNA)—artist's representation

The incidence of influenza A_2. In this country, where influenza is one of the leading causes of morbidity, influenza A_2 (Asian) continues to be a serious medical problem. In 1957 influenza A_2 was responsible for approximately 40,000 excess deaths in a three-month period. Since that year the most prevalent influenza virus has been A_2 (Asian).

What is Symmetrel®? "Symmetrel" (amantadine HCl) is a new synthetic chemical which acts as a molecular barrier to virus penetration. It provides for the first time specific oral medication for the prevention of respiratory infections caused by influenza A_2 (Asian) viruses—an entirely new approach in preventive medicine.

For prescribing information, see last page of this presentation

What Symmetrel® (amantadine HCl) means to you

...the first and only oral chemical agent to prevent influenza A_2 (Asian).

...not a vaccine or antibiotic, but a new synthetic chemical unrelated to any other chemotherapeutic agent.

...unique mode of action: prevents virus penetration of the host cell without affecting vital cell functions.

...specifically active against all influenza A_2 viruses tested to date.

...not indicated for the prevention of influenzal or respiratory illness other than influenza A_2 or for the treatment of established disease.

...does not interfere with normal antibody response; acts in concert with pre-existing antibody.

What Symmetrel® means to your patient

...possible immediate influenza A_2 protection when taken following suspected contact.

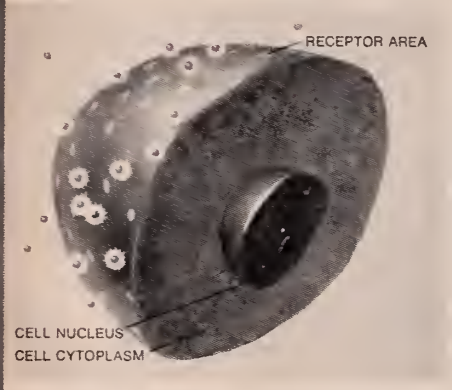
...may be particularly useful during outbreaks or epidemics and for high-risk patients in whom the occurrence of influenza A_2 is especially hazardous.

...a high degree of safety in clinical use.

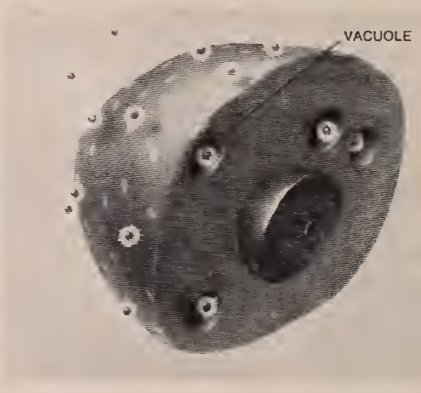
...simple once daily or b.i.d. dosage.

The mode of action of Symmetrel®

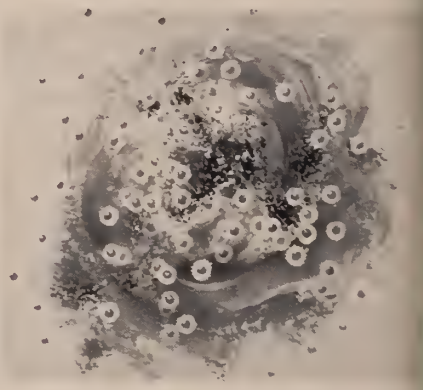
How the influenza virus invades and destroys the untreated cell



1 Viruses outside the cell attach themselves to specific cell receptor areas

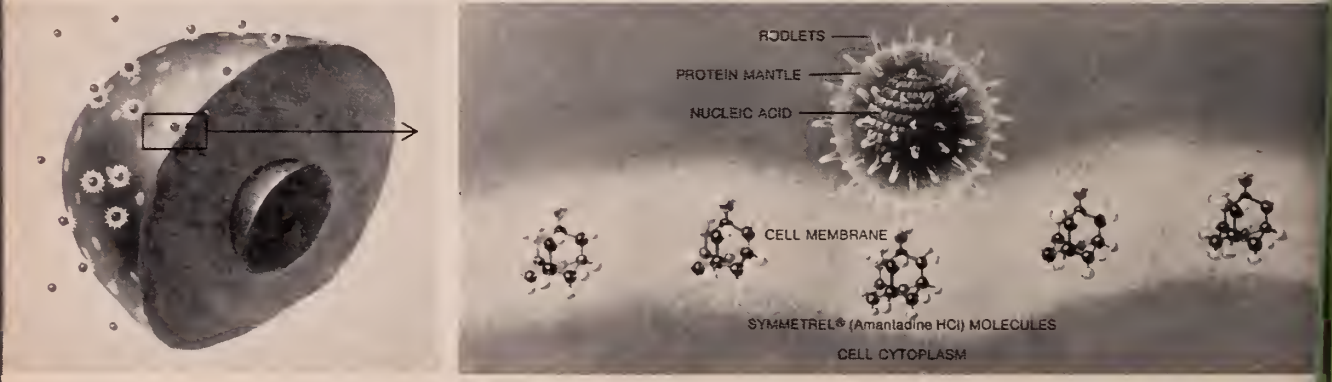


2 The virus is incorporated into a vacuole within the cell. From this vacuole the virus nucleic acid passes into the cell cytoplasm



3 The virus nucleic acid then directs the cell to produce both new virus nucleic acid and virus protein coat material which aggregate to form new virus particles. This process leads to the release of new virus particles and eventual destruction of the cell

How Symmetrel® (Amantadine HCl) prevents virus invasion[1]



Our current knowledge leads us to believe "Symmetrel" acts as a molecular barrier to influenza virus penetration. Shown here in a greatly enlarged section, "Symmetrel"—located at the cellular membrane—effectively prevents (blocks) virus penetration. Thus, "Symmetrel" does not directly destroy the virus particle but acting as a virostat prevents the cycle of virus penetration; virus replication, and cell destruction that is characteristic of virus invasion of animal cells (tissue). *Artist's conception based on current scientific knowledge.*

1. "Mode of Action of the Antiviral Activity of Amantadine in Tissue Culture", Hoffmann, C. E.; Neumayer, E. M.; Haff, R. F.; and Goldsby, R. A., Journal of Bacteriology *90*,623 (1965).

afety of Symmetrel® Confirmed. When used as indicated, is generally well tolerated. No kidney, ver, bone marrow, or hematological disturbances have been observed.

rescribing Information

dications: "Symmetrel" is indicated for the preven-on (prophylaxis) of influenza A_2 in persons of all age oups. Early use is recommended, preferably before as soon as possible after actual or suspected con-ct with individuals suffering from influenza A_2. Symmetrel" should especially be considered for gh influenza-risk patient groups such as those suf-ring from chronic debilitating diseases and elderly rsons.

ntraindications: Not indicated for the prevention influenzal or respiratory illness other than influ-za A_2 or for the treatment of established disease.

arnings: Administration to patients with central rvous system disease, particularly geriatric patients th cerebral arteriosclerosis, and patients with a story of epilepsy or other "seizures," requires strict bservation for possible untoward effects (see Ad-rse Reactions). Patients taking psychopharmaco-gic drugs, central nervous system stimulants, or coholic beverages should be observed for possible idence of intolerance. Those patients who experi-ce central nervous system effects or blurring of sion should be cautioned against driving or working situations where alertness is important.

No teratogenic effects have been seen in reproduc-e studies in rats and rabbits. Studies in pregnant omen have, however, not been done and use of this ug in women of childbearing age should be under-ken only after weighing the possible risks to the tus against benefit to the pregnant patient. It should ot be administered to nursing mothers since it is not nown whether the drug is secreted in the milk.

ecautions: Ineffective against bacterial infections. tients should be observed for idiosyncratic reac-ons as with all new drugs. Geriatric patients with e-existing serious medical illnesses with mental or ysical deterioration should be followed carefully edically while taking "Symmetrel." (See Adverse eactions.)

dverse Reactions: With higher than indicated doses anifestations of central nervous system effects such as nervousness, insomnia, dizziness, lightheadedness, drunken feeling, slurred speech, ataxia, inability to concentrate and some psychic reactions including depression and feelings of detachment were seen. Occasional blurred vision was reported at higher doses. Some of the milder and less pronounced symptoms above have been reported in a small number of patients taking the recommended dosage of 200 mg per day. Those were mostly transient and disappeared with continued administration of the drug. Some geriatric patients developed paranoid or hallucinatory behavior and became unmanageable while taking 200 mg daily. Medically unselected seriously deteriorated geriatric patients showed poor clinical tolerance after several weeks of daily dosing with 200 mg per day. One elderly patient with a history of prior cerebrovascular accident developed visual hallucinations and grand-mal convulsions while on drug at 800 mg per day. Some cases of dry mouth, gastrointestinal upset and skin rash and rarely, tremors, anorexia, pollakiuria, and nocturia have been also reported.

Safety: When used as indicated, is generally well tolerated. No kidney, liver, bone marrow, or hematological disturbances have been observed.

Dosage: *Adults:* Two 100 mg capsules (or 4 teaspoonfuls of syrup) as a single daily dose or the daily dose may be divided into one capsule of 100 mg (or 2 teaspoonfuls of syrup) twice a day.

Children: 1 yr.—9 yrs. of age: Calculate total daily dose on the basis of 2 mg to 4 mg per pound of body weight per day (but not to exceed 150 mg per day). Daily dose, given as the syrup, should be given in 2 or 3 equal portions.

9 yrs.—12 yrs. of age: Total daily dose 200 mg given as one capsule of 100 mg (or 2 teaspoonfuls of syrup) twice a day.

How Supplied: *Capsules:* Bottles of 100. Each red, gelatin capsule contains 100 mg amantadine HCl.
Syrup: Bottles of 1 pint. Each 5 ml (1 teaspoonful) contains 50 mg amantadine HCl.

DUPONT

Symmetrel®

(Amantadine HCl)

A molecular barrier to virus penetration

arrest diarrhea

in • gastroenteritis • acute infections



LOMOTIL®

Each tablet and each 5 cc. of liquid contains:

diphenoxylate hydrochloride ..... 2.5 mg.
(Warning: May be habit forming)

atropine sulfate ..... 0.025 mg.

Effectiveness: Lomotil possesses a unique degree of effectiveness in both acute and chronic diarrhea.

Convenience: Lomotil is supplied as small, easily carried, easily swallowed tablets and as a pleasant, fruit-flavored liquid.

Versatility: The therapeutic efficiency, safety and convenience of Lomotil may be used to advantage alone or as adjunctive therapy in diarrhea associated with:

- **Ulcerative colitis**
- **Acute infections**
- **Irritable bowel**
- **Regional enteritis**
- **Drug therapy**
- **Food Poisoning**
- **Functional hypermotility**
- **Malabsorption syndrome**
- **Ileostomy**
- **Gastroenteritis and colitis**

Dosage: For correct therapeutic effect—Rx correct therapeutic dosage. The recommended initial daily dosages, given in divided doses, until diarrhea is controlled, are:

Children: Age	Total Daily Lomotil Dosage	Lomotil Liquid Dosage (Each teaspoonful [4 cc.] contains 2 mg. of diphenoxylate HCl)
3-6 months	3 mg.	½ tsp. 3 times daily
6-12 months	4 mg.	½ tsp. 4 times daily
1-2 years	5 mg.	½ tsp. 5 times daily
2-5 years	6 mg.	1 tsp. 3 times daily
5-8 years	8 mg.	1 tsp. 4 times daily
8-12 years	10 mg.	1 tsp. 5 times daily

Adults: 20 mg. (2 tsp. 5 times daily or 2 tablets 4 times daily) Based on 4 cc. per teaspoonful. Maintenance dosage may be as low as one-fourth the initial daily dose.

Precautions: Lomotil, brand of diphenoxylate hydrochloride with atropine sulfate, is a Federally exempt narcotic preparation of very low addictive potential. Recommended dosages should not be exceeded. Lomotil should be kept out of reach of children since accidental overdosage may cause severe respiratory depression. Lomotil should be used with caution in patients with impaired liver function and in patients taking addicting drugs or barbiturates. The subtherapeutic amount of atropine is added to discourage deliberate overdosage.

Side Effects: Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness, insomnia, numbness of extremities, headache, blurring of vision, swelling of the gums, euphoria, depression and general malaise.

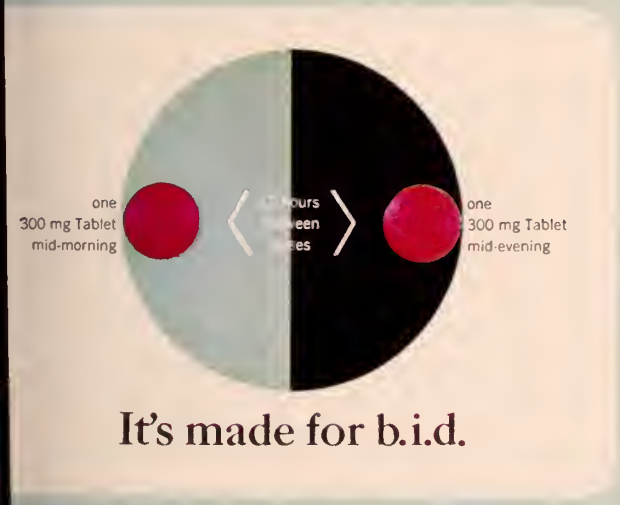


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It's made for b.i.d.

ctive in a wide range of everyday infections — respira-, urinary tract and others — in the young and aged — acutely or chronically ill — when the offending organ- are tetracycline-sensitive.

raindication — History of hypersensitivity to demethyl-rtetracycline.

ning — In renal impairment, usual doses may lead to ssive systemic accumulation and liver toxicity. Under conditions, lower than usual doses are indicated if therapy is prolonged, serum level determinations be advisable. A photodynamic reaction to natural or icial sunlight has been observed. Small amounts of and short exposure may produce an exaggerated burn reaction which may range from erythema to re skin manifestations. In a smaller proportion, pho-ergic reactions have been reported. Patients should direct exposure to sunlight and discontinue drug at irst evidence of skin discomfort.

autions and Side Effects — Overgrowth of nonsuscep- organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. Use of demethylchlortetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect occurs mostly during long-term use but has also been observed in short treatment courses. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment. Side reactions include glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and dermatitis. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Anaphylactoid reactions have been reported.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products.

Capsules: 150 mg; *Tablets:* film coated, 300 mg, 150 mg, and 75 mg of demethylchlortetracycline HCl.

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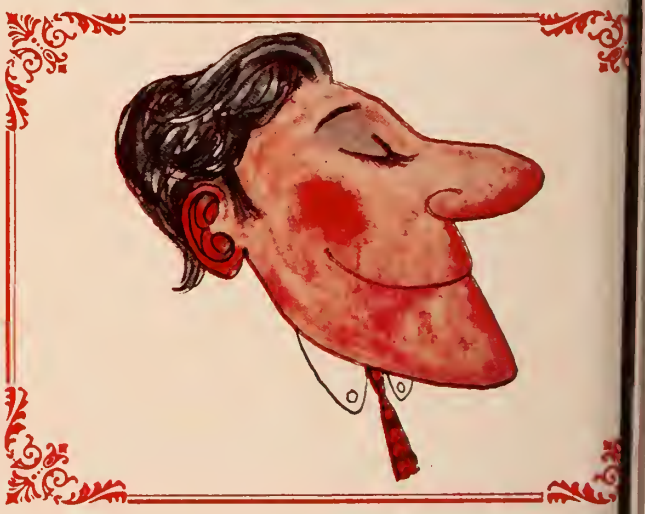
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Otrivin®

(xylometazoline CIBA)
on Rx only







■ quickly relieves congested nose
■ action is gentle, yet prolonged
■ side effects are minimal

INDICATION: Nasal congestion. CONTRAINDICATION: Do not use in patients sensitive to small doses of sympathomimetic substances. WARNINGS: Prolonged or excessive use may cause rebound congestion. Use cautiously in patients with hyperthyroidism, coronary artery disease, hypertension, and diabetes. CAUTION: Do not shake Nasal Spray. Rinse Nasal Solution dropper or Nasal Spray tip in hot water after each use. No more than one person should use the same dropper bottle or nasal spray.
SIDE EFFECTS: Occasional local reactions: rebound congestion, slight burning or stinging, sneezing, dry nose. Occasional systemic effects: headache, drowsiness, lightheadedness, insomnia, palpitations. Overdosage in young children may produce profound sedation.
DOSAGE: **Adults:** *Nasal Solution*—2 or 3 drops in each nostril every 4 to 6 hours. *Nasal Spray*—Squeeze rapidly once or twice in each nostril every 4 to 6 hours. **Children under 12:** *Pediatric Nasal Solution*—2 or 3 drops in each nostril every 4 to 6 hours. One drop should be used in infants under 6 months. *Pediatric Nasal Spray*—Squeeze ra once in each nostril holding tube upright; repeat every 4 hou necessary. SUPPLIED: OTRIVIN® hydrochloride (xylometazoline h chloride CIBA) *Nasal Solution*, 0.1%; dropper bottles of 1 fluido bottles of 1 pint. *Nasal Spray*, 0.1%; plastic squeeze tubes of 1 *Pediatric Nasal Solution*, 0.05%; dropper bottles of 1 fluidounce. *atric Nasal Spray*, 0.05%; plastic squeeze tubes of 15 ml. *Nasal tions* contain either 0.1% or 0.05% xylometazoline hydrochl triethanolamine, hydrochloric acid, sodium chloride, and pheny curic acetate 1:50,000 as preservative in water. *Nasal Sprays* c either 0.1% or 0.05% xylometazoline hydrochloride, potassium phate monobasic, potassium chloride, sodium phosphate di sodium chloride, and benzalkonium chloride 1:5000 as preservat water. *Consult complete literature before prescribing.*
CIBA Pharmaceutical Company, Summit, N. J.

C I B

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Cream

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In Neo-Synalar, fluocinoline acetonide controls the inflammation and provides rapid relief from associated pruritus. At the same time, its antibacterial component—neomycin—combats superficial infection caused by many gram-positive and gram-negative bacilli[2] that often colonize and thrive on abraded skin.[1]

A specially formulated vanishing cream base that is greaseless and odor free makes Neo-Synalar cosmetically appealing, and encourages greater patient cooperation.

controls the infection

stops the scratch

Contraindications: Tuberculous, fungal, and most viral lesions of the skin (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of its components. **Precautions:** Neomycin rarely produces allergic reactions. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. Where severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. **Side Effects:** Side effects are not ordinarily encountered with topical corticosteroids. As with all drugs, however, a few patients may react unfavorably to Neo-Synalar under certain conditions. **Availability:** Neo-Synalar Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes.

References: 1. Pillsbury, D. M., Shelley, W. B., and Kligman, A. M.: A manual of cutaneous medicine, Philadelphia, Saunders, 1961, p. 79. **2.** Barber, M., and Garrod, L. P.: Antibiotic and chemotherapy, Baltimore, Williams and Wilkins, 1963, p. 111.

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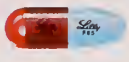
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Warning: May be habit-forming.

Precautions: Tuinal should be used cautiously in patients with decreased liver function, since prolongation of effect may occur.

Adverse Reactions: Idiosyncrasy, such as excitement, hangover, or pain, may appear. Hypersensitivity reactions occur in some patients, especially in those with asthma, urticaria, or angioneurotic edema.



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Supplied: ¾, 1½, and 3-grain Pulvules®.

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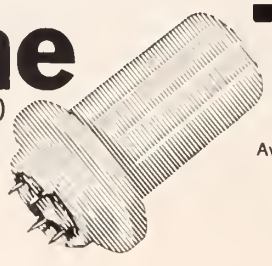
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DIURETIC ACTION: Clinically the oral administration of AQUATAG (benzthiazide) results in diuretic activity within two hours with maximal natriuretic, chloruretic, and diuretic effects occurring during the fourth, fifth and sixth hours. Maintenance of response continues for approximately 12 to 18 hours. Acidosis is an unlikely complication since therapeutic doses of AQUATAG (benzthiazide) do not appreciably increase bicarbonate excretion. Edematous patients receiving 50 mg. of AQUATAG (benzthiazide) daily for five days developed a maximal increase in the rate of sodium excretion on the first day, and maintained this high rate until depletion of excessive body stores of sodium.

In congestive heart failure patients AQUATAG (benzthiazide) produced the same weight loss, during a 48 hour treatment period as did a maximally effective dose of hydrochlorothiazide.

DOSAGE: Diuresis initially 50 to 200 mg.; maintenance 25 to 150 mg. daily. Hypertension 50 to 100 mg. initially, adjusted to 50 mg. t.i.d. or downward to minimal effective dosage level.

WARNINGS: Use with caution in the presence of renal disease as azotemia may be precipitated or increased. In patients with advanced hepatic disease, electrolyte imbalance may result in hepatic coma. Dosage of coadministered antihypertensive agents should be reduced by at least 50%. In cases of suspected electrolyte imbalance, serum electrolyte determinations should be performed and imbalance, if any, corrected. Stenosis or ulcer of small intestine have been reported with coated potassium formulas, and surgery has been required and deaths have occurred. Based on surveys of both United States and foreign physicians, incidence of these lesions is low and a causal relationship in man has not been definitely established. Until further experience has been obtained the use of the drug in pregnant patients should be weighed against possible hazards to the fetus.

CONTRAINDICATIONS: AQUATAG (benzthiazide) is contraindicated in progressive renal disease or dysfunction including increasing oliguria and azotemia. Continued administration of this drug is contraindicated in patients who show no response to its diuretic or antihypertensive properties. Severe hepatic disease is a relative contraindication. (See "Warnings" above.)

PRECAUTIONS AND SIDE EFFECTS: Electrolyte imbalance with hypokalemia (digitalis toxicity may be precipitated) hypochloremic alkalosis and hyponatremia may occur.

Patients with cirrhosis should be observed for impending hepatic coma and hypokalemia. Other reactions may include blood dyscrasias, hyperuricemia and gout, nausea, jaundice, anorexia, vomiting, diarrhea, dizziness, paresthesia, photosensitivity and headache. Hepatic tetor, tremor, confusion and drowsiness are signs of impending pre coma and coma in patients with cirrhosis. Insulin requirements may be altered in diabetes. AQUATAG (benzthiazide) should be used with caution post-operatively as hypokalemia is not uncommon. Potassium supplementation may be advisable pre- and post-operatively. There have been occasional reports of thrombocytopenia, leukopenia, agranulocytosis, aplastic anemia and precipitation of acute pancreatitis or jaundice.

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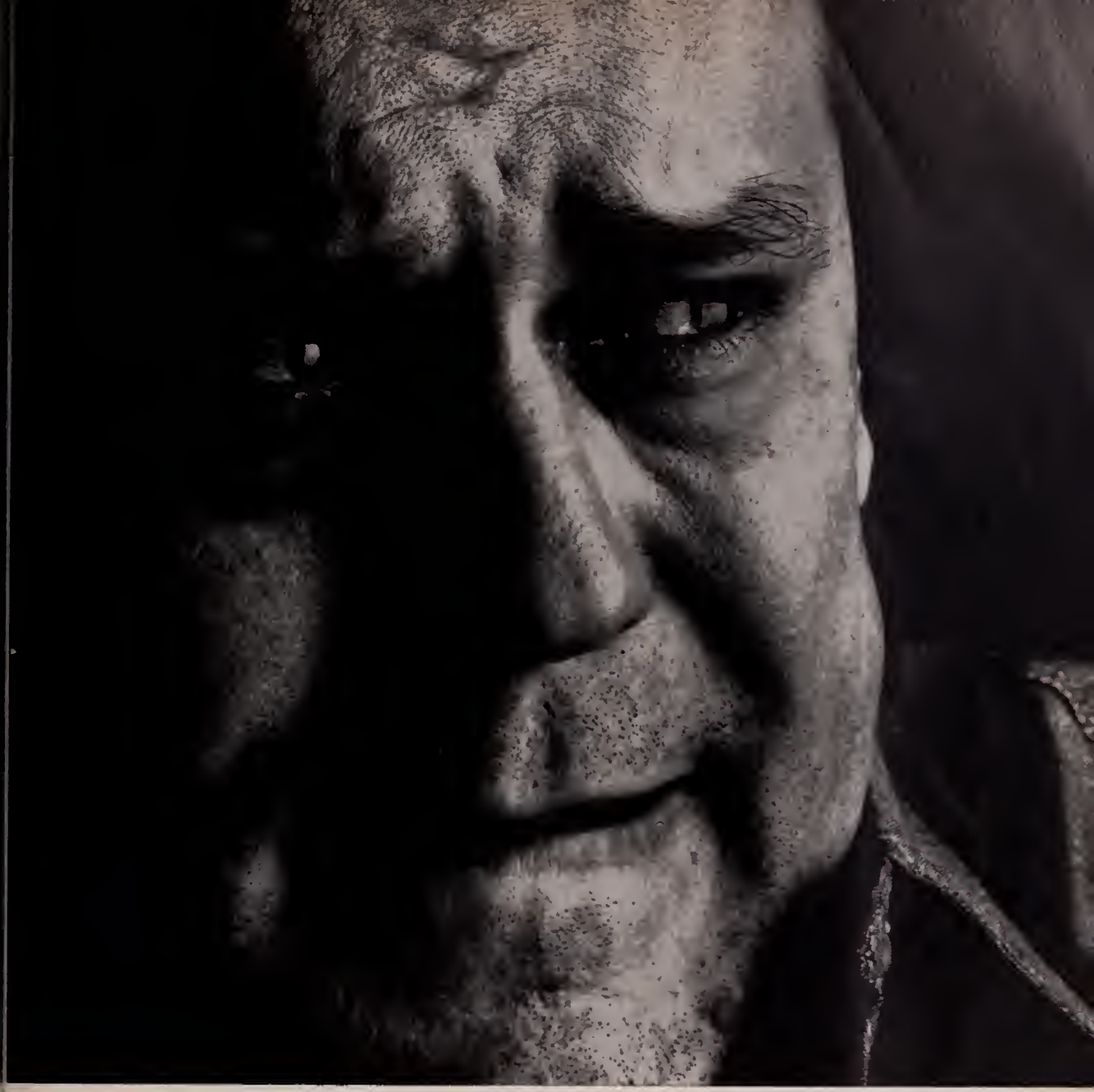


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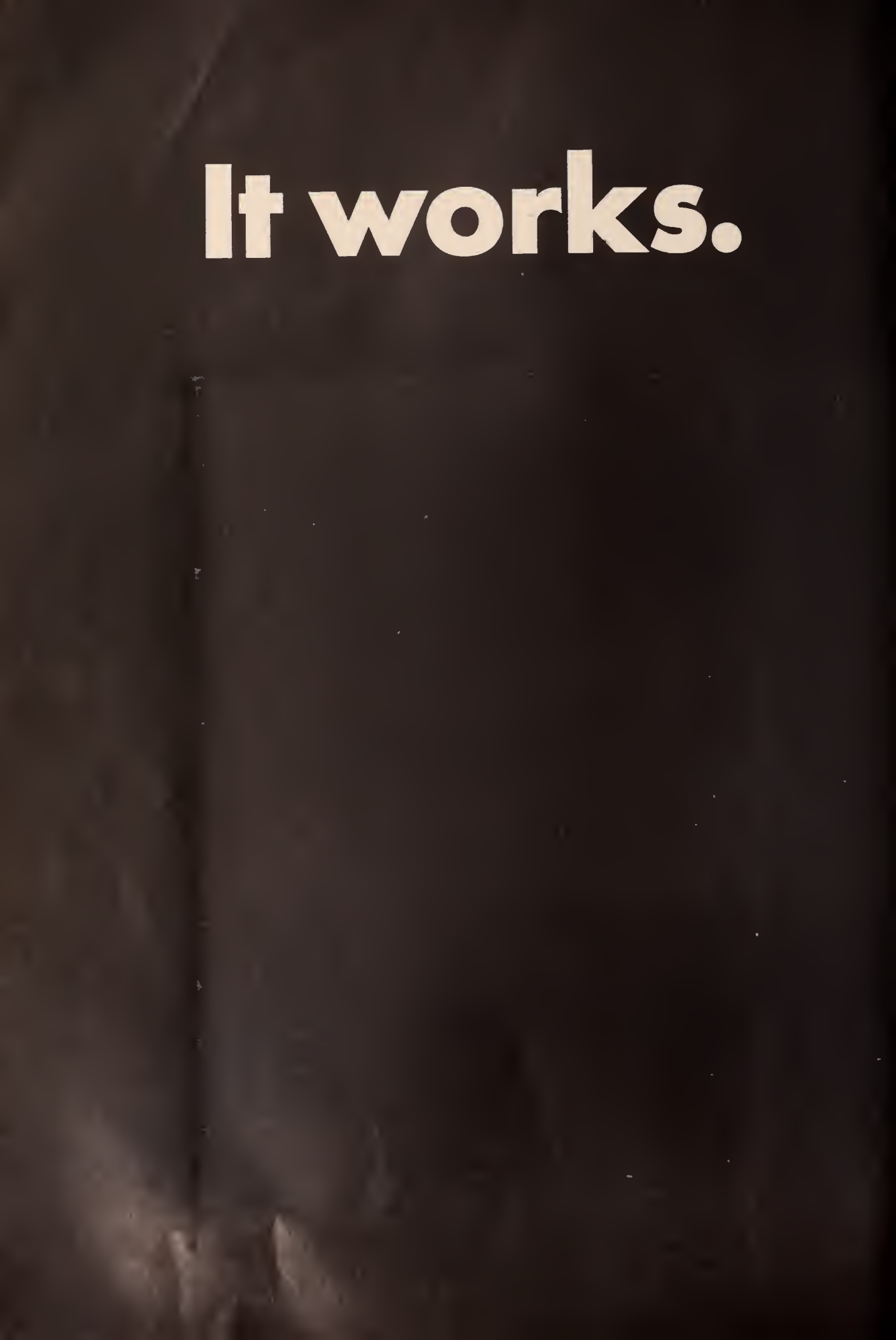
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WARNING: Overdosage produces anticholinergic side effects. Although the animal reproduction studies are negative, until there is clinical confirmation of safety in pregnancy, this product should not be used in women who may become pregnant unless in the opinion of the physician the benefits outweigh the risks.

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DOSAGE: The usual adult dosage is 1 mg. by mouth three times daily. If necessary, the dose may be increased to 2 mg. three times daily. Pediatric dosage has not been determined.

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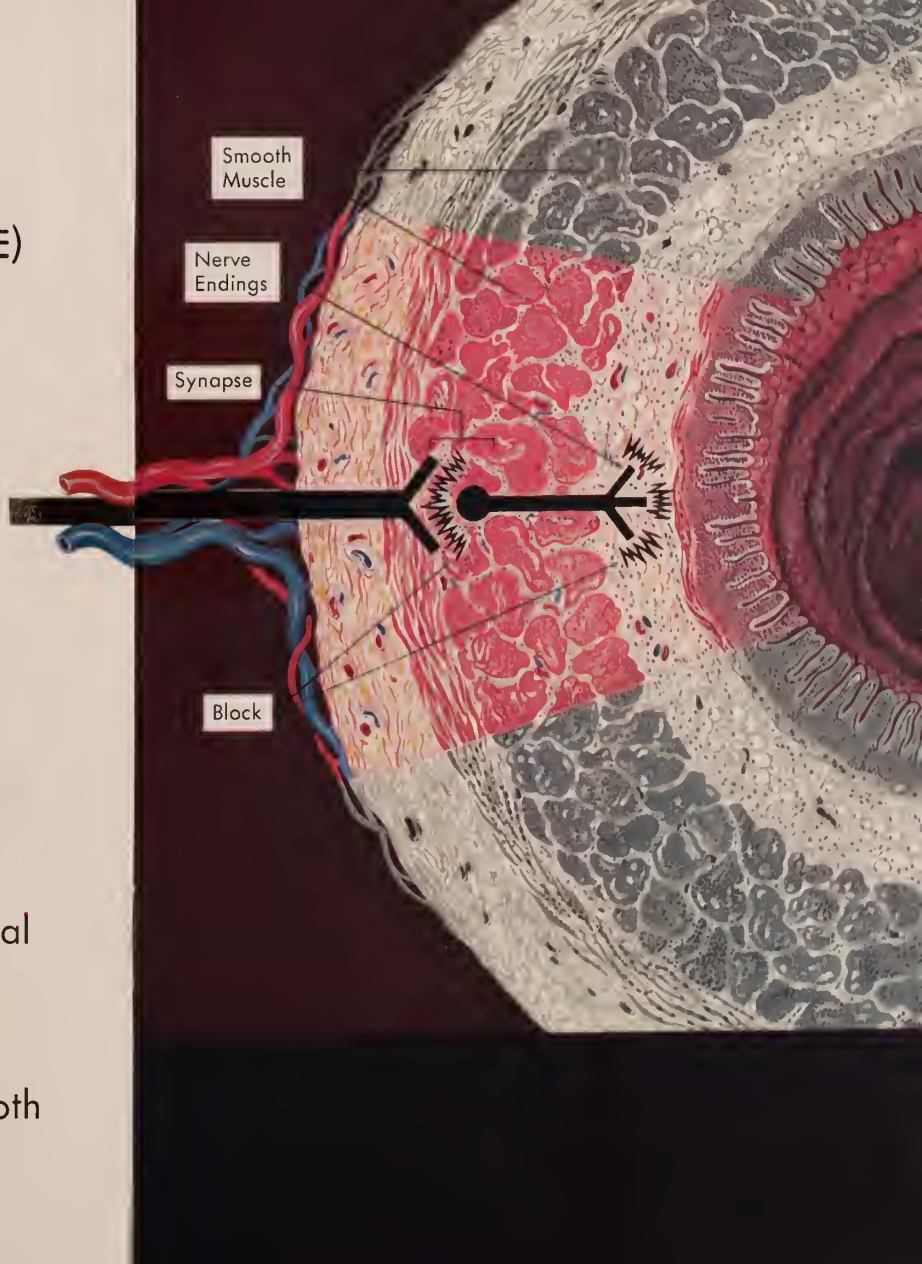
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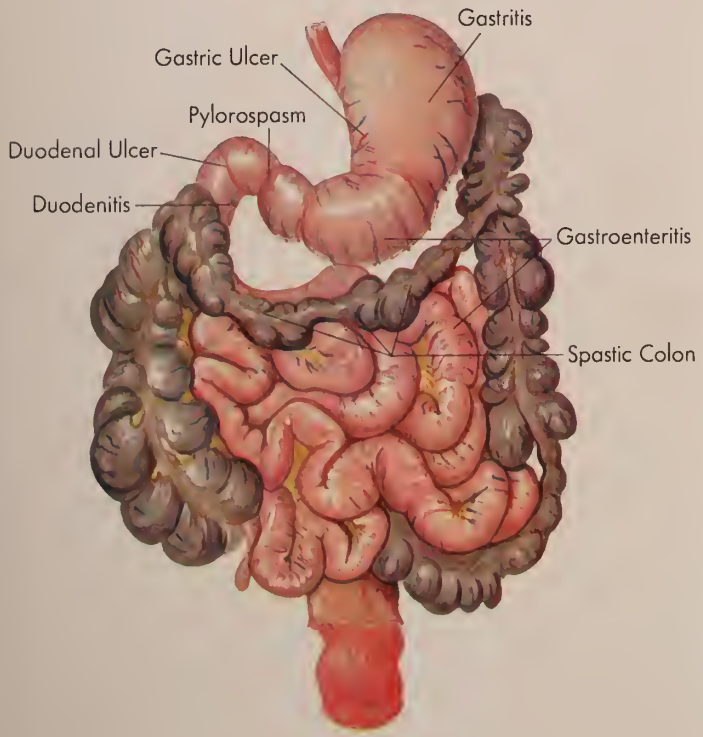


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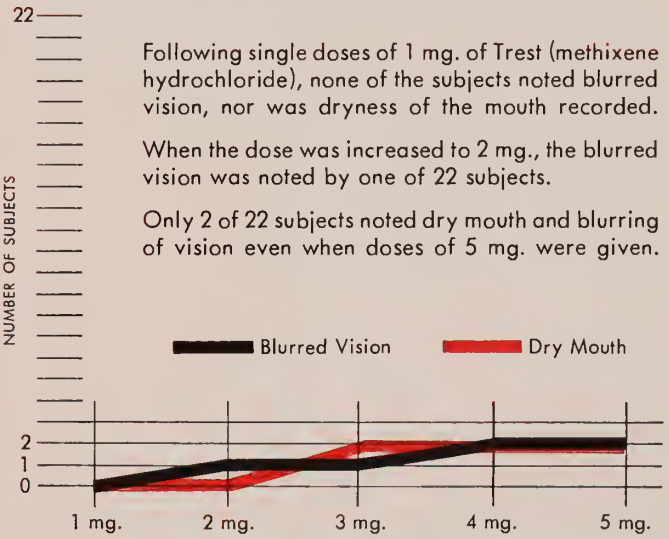
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Following single doses of 1 mg. of Trest (methixene hydrochloride), none of the subjects noted blurred vision, nor was dryness of the mouth recorded.

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Only 2 of 22 subjects noted dry mouth and blurring of vision even when doses of 5 mg. were given.

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Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Warn against hazardous occupations requiring complete mental alertness. Use caution in administering to addiction-prone patients or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of child-bearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In elderly and debilitated and in children over five, limit dosage to smallest effective amount, increasing gradually as needed and tolerated. In general, concomitant use with other psychotropics is not recommended. Paradoxical reactions have been reported in psychiatric patients and hyperactive aggressive children. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically. Observe usual precautions in presence of impaired renal or hepatic function, impending depression and suicidal tendencies.

Adverse reactions: Drowsiness, ataxia and confusion may occur, especially in elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. Syncope occurs rarely. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis, jaundice and hepatic dysfunction) may develop occasionally, making periodic blood counts and liver-function tests advisable during protracted therapy. Individual maintenance dosages should be determined.

Dosage: Oral—Adults: Mild to moderate anxiety and tension, 5 or 10 mg t.i.d. or q.i.d.; severe states, 20 or 25 mg t.i.d. or q.i.d. Geriatric patients: 5 mg b.i.d. to q.i.d.

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Not indicated in children under 6 years; absolute dosage for 6 to 12 year-olds not established.

Side Effects: Therapy-interrupting side effects are rare. Transient mild drowsiness is common initially; if persistent, reduce dosage. Dizziness, vertigo and headache have also occurred infrequently; syncope, rarely. Mild paradoxical reactions (excitement, stimulation of affect) are reported in psychiatric patients. Minor diffuse rashes (morbilliform, urticarial and maculopapular) are rare. Nausea, lethargy, edema, slurred speech, tremor and altered libido are rare and generally controllable by dosage reduction. Although rare, leukopenia and hepatic dysfunction including jaundice have been reported during therapy. Periodic blood counts and liver function tests are advised. Ataxia, reported rarely, does not appear related to dose or age.

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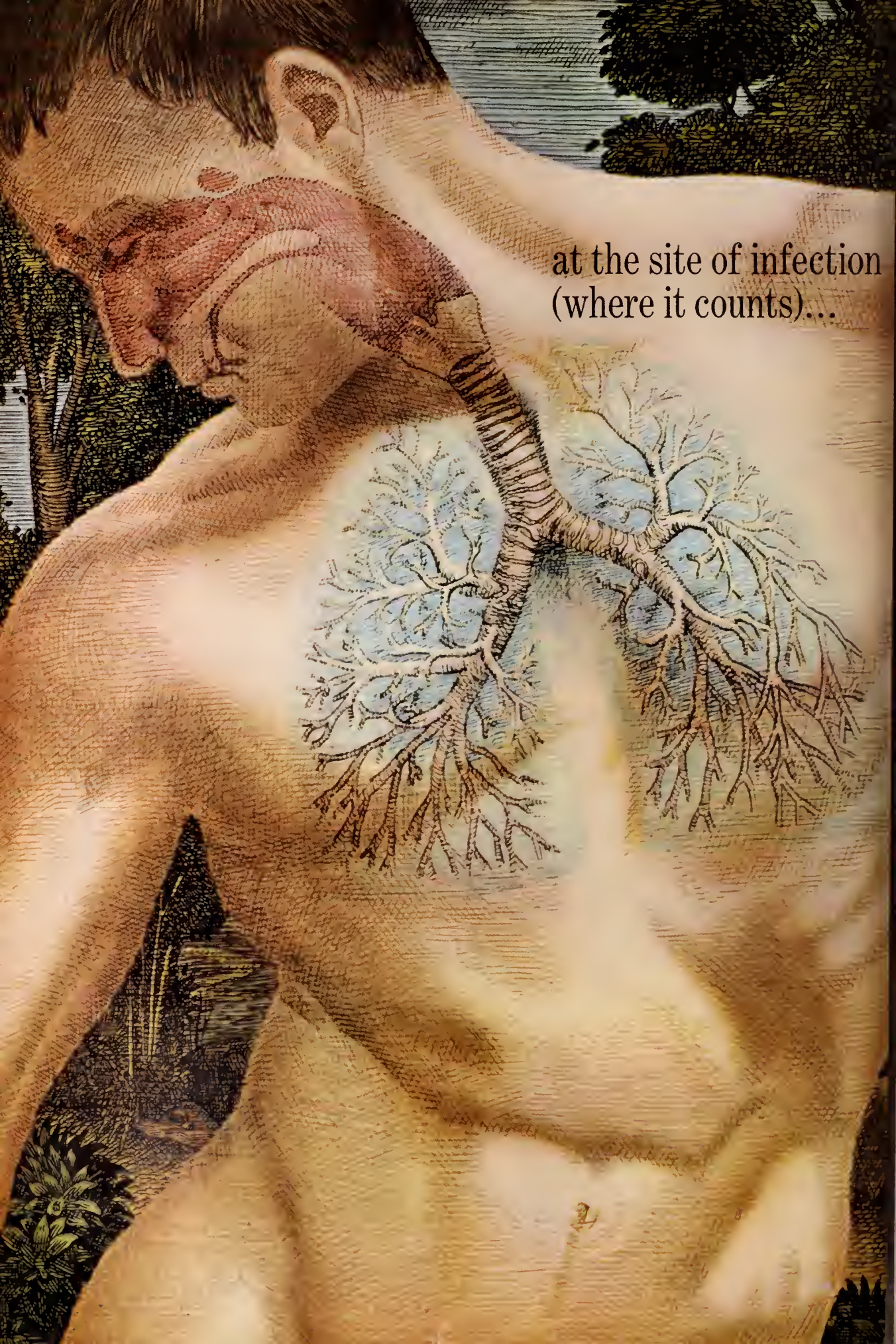
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Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci on culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone.

Contraindications: Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with preexisting liver disease or dysfunction.

Side-Effects: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have appeared in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly if the drug is readministered to sensitive patients, usually within forty-eight hours. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to be definitely related to use of the drug, laboratory findings characterized by increased direct-reacting bilirubin, ele alkaline phosphatase levels, negative or weakly positive cep flocculation and thymol turbidity tests, elevated serum glu oxalacetic transaminase levels, peripheral eosinophilia, an mal cholecystograms.

Individual idiosyncrasy seems evident since jaundice ha been reported in other patients taking prolonged courses medication. Patients with chronic infection have been give to 2 Gm. of the drug daily for periods of two to six months patients with rheumatic fever have taken prophylactic do 0.5 Gm. daily for two years without difficulty. In one gro 144 patients who received the drug daily for two years, no dice was noted. It was of interest that members of six of patients' families, who were not taking the drug, had epi of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels determined in a group of fifty-four adults and children wh 250 mg. of Ilosone daily for an average of sixteen mont rheumatic fever prophylaxis. The results were compared those of a similar group of forty-four patients who receive icillin. There were no cases of jaundice in either group. Elev of SGPT and serum alkaline phosphatase levels during the c of treatment was observed in one patient treated with Il and in two patients treated with penicillin. Seven other pa in the group receiving Ilosone and four others in the peni group showed elevations in one of the tests at some time d administration of the drugs.

Very satisfactory therapeutic results, without toxicity, reported in 102 pediatric patients who received short-term day) courses of Ilosone in the treatment of streptococcus tions. Results of liver function tests in these patients were parable to those in a similar control group who had re penicillin.

Gastro-intestinal disturbances not associated with hepat fects are observed in a small proportion of individuals as a of a local stimulating effect of the medication on the alime tract; however, the normal intestinal gram-negative bac flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with th of erythromycin, there have been occasional reports of urti skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally.
Ilosone Pulvules®
Ilosone Chewable Tablets
Ilosone Drops
Ilosone, 125, for Oral Suspension

For infants and for children under twenty-five pounds of weight, the usual dosage is 5 mg. per pound every six hour children twenty-five to fifty pounds, 125 mg. every six h (Tablets Ilosone Chewable should be chewed or crushe swallowed with water.)

For adults and for children over fifty pounds, the usual d of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythro therapy should be considered.

In the treatment of syphilis, the recommended total dos 20 to 30 Gm. given in divided doses for a period of ten to f days. Close follow-up of the patient is necessary since er mycin drugs have not had adequate evaluation in all sta syphilis. Examinations of spinal fluid are recommended a of the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four day recommended. In the treatment of gonorrhea, patients w suspected lesion of syphilis should have a dark-field exami before receiving antibiotics, and monthly serologic tests s be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and 25 (equivalent to base), in bottles of 24 and 100.

Tablets Ilosone Chewable, N.F., 125 mg. (equivalent to b in bottles of 50.

Ilosone Drops, 5 mg. (equivalent to base) per drop, in 1 size packages, with dropper calibrated at 25 and 50 mg.

Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equiv to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size pack

References: 1. Griffith, R. S., and Black, H. R.: Am. J. M. Sc., *247*:69
2. Griffith, R. S., and Black, H. R.: Antibiotics & Chemother., *12*:398
3. Hirsch, H. A., Pryles, C. V., and Finland, M.: Am. J. M. Sc., *239*:198,

Additional information available to physicians upon request.
Eli Lilly and Company, Indianapolis, Indiana 46206.

The AMBAR SCRAPBOOK of Obesity Oddities

FACT & LEGEND



GALLSTONES HAVE BEEN FOUND IN 60% OF PATIENTS WHO WEIGH MORE THAN 300 POUNDS, 45% HAVE DIABETES, AND 15-TO-20% HAVE HIGH BLOOD PRESSURE.

SOURCE: DUNCAN, G.G.: SCIENCE NEWS LETTER, 83:403 (JUNE 29) 1963.

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ACCORDING TO THE NEW YORK TIMES OF APRIL 13, 1890, THE DEFEAT OCCURRED BECAUSE HE FAILED TO CHECK HIS INTELLIGENCE INFORMATION. "IT WAS A MATTER OF MERE INDOLENCE AND THIS INDOLENCE WAS CAUSED BY FAT."

SOURCE: JAMA 186:65 (OCT. 5) 1963.



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*SOURCE: ARCHIVES OF GENERAL PSYCHIATRY 8:26, (JUNE 1963).



THE BOOK *"PRAY YOUR WEIGHT AWAY"* URGES READERS TO "ASK GOD TO HELP YOU LIKE EXERCISE" FOR 15 MINUTES A DAY.

SOURCE: REV. C.W. SHEDD: NEW YORK: LIPPINCOTT, 1958.

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Ambar #2 Extentabs®

methamphetamine HCl 15 mg., phenobarbital 64.8 mg. (1 gr.) (Warning: may be habit forming)

BRIEF SUMMARY—**Indications:** Ambar suppresses appetite and helps offset emotional reactions to dieting. **Side Effects:** Nervousness or excitement occasionally noted, but usually infrequent at recommended dosages. Slight drowsiness has been reported rarely. **Precautions:** Administer with caution in the presence of cardiovascular disease or hypertension. **Contraindications:** Hypersensitivity to barbiturates or sympathomimetics; patients with advanced renal or hepatic disease. See package insert for further details.

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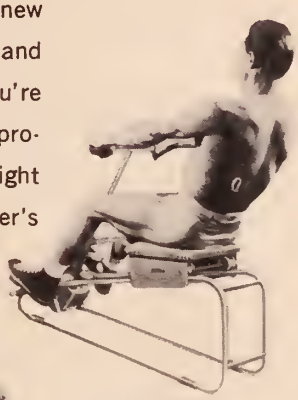
Contraindications: Hypersensitivity to antihistamines. Not recommended for use during pregnancy. **Precautions:** Until patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension. **Side Effects:** Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability or excitement may be encountered.
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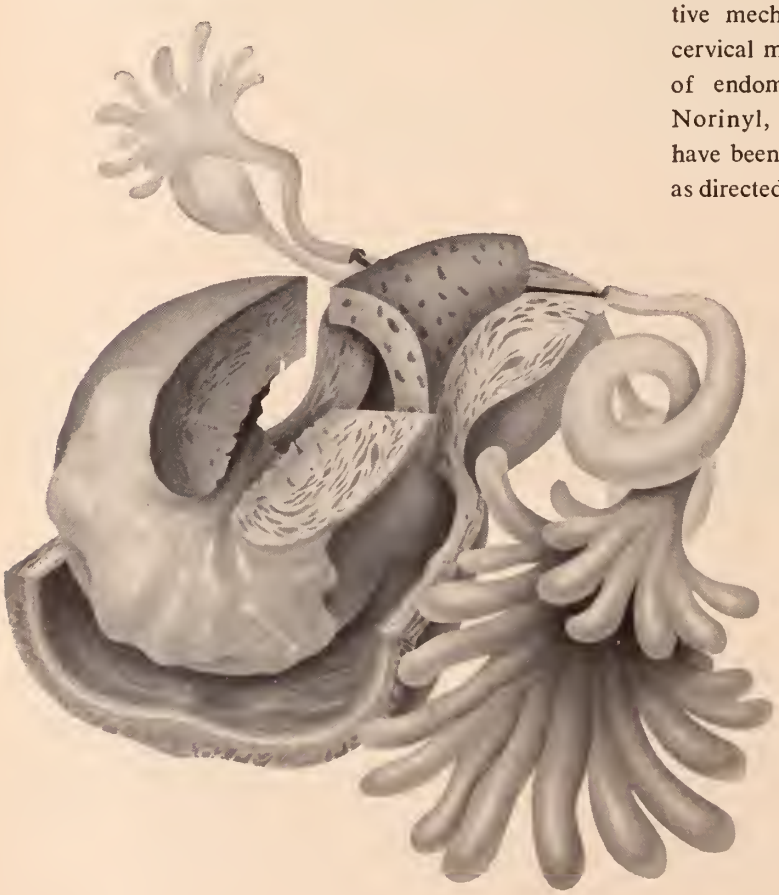
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Norinyl provides multiple action for maximum assurance of success. It does not depend on ovulation inhibition alone for contraceptive effectiveness. The mechanism of action of combined hormonal therapy results in ovulation inhibition reinforced by other protective mechanisms, including a hostile cervical mucus[1-13] and an acceleration of endometrial changes.[1-3,7-16] With Norinyl, no unplanned pregnancies have been reported to date when used as directed.

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Contraindications: Thrombophlebitis or pulmonary embolism (current or past). Existing evidence does not support a causal relationship between use of Norinyl and development of thromboembolism. While a study which was conducted does not resolve definitively the possible etiologic relationship between progestational agents and intravascular clotting, it tends to confirm the findings of the Ad Hoc Advisory Committee appointed by the Food and Drug Administration to review this possibility. Cardiac, renal or hepatic dysfunction. Carcinoma of the breast or genital tract. Patients with a history of psychic depression should be carefully studied and the drug discontinued if depression recurs to marked degree. Patients with a history of cerebral vascular accident.

Warning: Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn.

Precautions: By May 1963, experience with norethindrone 2 mg.–mestranol 0.1 mg. had extended over 24 months. Through miscalculation, omission or error in taking the recommended dosage of Norinyl, pregnancy may result. If regular menses fail to appear and treatment schedule has not been adhered to, or if patient misses two menstrual periods, possibility of pregnancy should be resolved before resuming Norinyl. If pregnancy is established, Norinyl should be discontinued during period of gestation since virilization of the female fetus has been reported with oral use of progestational agents or estrogen. When lactation is desired, withhold Norinyl until nursing needs are established. Existing uterine fibroids may increase in size. In metabolic or endocrine disorders, careful clinical preevaluation is indicated. A few patients without evidence of hyperthyroidism had elevated serum protein-bound iodine levels, which in the light of present knowledge, does not necessarily imply hyperthyroidism. Protein-bound iodine increased following estrogen administration. Bromsulphalein retention has occurred in up to 25% of patients without evidence of hepatic dysfunction. Studies from 24-hour urine collections have shown an increase in aldosterone and 17-ketosteroids and decrease in 17-hydroxycorticoid levels. Thus, Norinyl should be discontinued prior to and during thyroid, liver or adrenal function tests. Because progestational agents may cause fluid retention, conditions such as epilepsy, migraine and asthma require careful observation. Thus far no deleterious effect on pituitary, ovarian or adrenal function has been noted; however, long-range possible effect on these and other organs must await more prolonged observation. Norinyl should be used with caution in patients with bone, renal or any disease involving calcium or phosphorus metabolism.

Side Effects: Intermenstrual bleeding; amenorrhea; symptoms resembling early pregnancy, such as nausea, breast engorgement or enlargement, chloasma and minor degree of fluid retention (if these should occur and patient has not strictly adhered to medication plan, she should be tested for pregnancy); weight gain; subjective complaints such as headache, dizziness, nervousness, irritability; in a few patients libido was increased. In a total of 3,090 patients, 2.2% discontinued medication because of nausea.

NOTE: See sections on contraindications and precautions for possible side effects on other organ systems.

Dosage and Administration: One Norinyl tablet orally for 20 days, commencing on day 5 through and including day 24 of the menstrual cycle. (Day 1 is the first day of menstrual bleeding.)

Availability: Dispensers of 20 and 60 tablets; bottles of 100.

References: 1. Council on Drugs: JAMA 187:664 (Feb 29) 1964 2. Bryan, F. E.: Canad. Med. Ass. J. 92:287 (Feb. 6) 1965 3. Goldzieher, J. W.: Med. Clin. N. Amer. 48:529 (Mar.) 1964 4. Cohen, M. R.: Paper presented at Symposium on Low Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med. Sci. 16:26 (Nov.) 1965 5. Hammond, O. O.: Ibid. 6. Rice-Wray, E., Goldzieher, J. W. and Aranda-Rosell, A.: Fertil. Ster. 14:402 (Jul.-Aug.) 1963 7. Goldzieher, J. W., Moss, L. E. and Ellis, L. T.: JAMA 180:359 (May 5) 1962 8. Kempers, R. D.: GP 29:88 (Jan.) 1964 9. Tyler, E. T.: JAMA 187:562 (Feb. 22) 1964 10. Rudel, H. W., Martinez-Manautou, J. and Maqueo Topete, M.: Fertil. Ster. 16:158 (Mar.-Apr.) 1965 11. Flowers, C. E., Jr.: N. Carolina Med. J. 25:139 (Apr.) 1964 12. Goldzieher, J. W.: Appl. Ther. 6:503 (June) 1964 13. The Control of Fertility: Report adopted by the Committee on Human Reproduction of the American Medical Association: JAMA 194:462 (Oct. 25) 1965 14. Flowers, C. E., Jr.: JAMA 188:1115 (June 29) 1964 15. Merritt, R. I.: Appl. Ther. 6:427 (May) 1964 16. Newland, O. O.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med. Sci. 16:28 (Nov.) 1965

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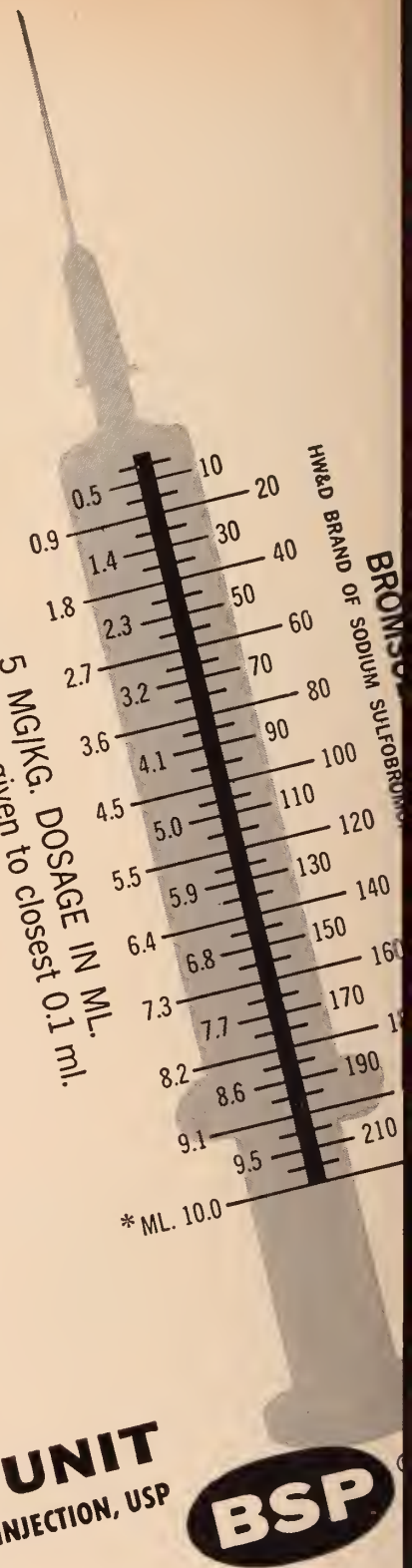
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NDICATION: Nasal congestion. CONTRAINDICATION: Do not use n patients sensitive to small doses of sympathomimetic substances. VARNINGS: Prolonged or excessive use may cause rebound congesion. Use cautiously in patients with hyperthyroidism, coronary artery isease, hypertension, and diabetes. CAUTION: Do not shake Nasal pray. Rinse Nasal Solution dropper or Nasal Spray tip in hot water fter each use. No more than one person should use the same dropper ottle or nasal spray.

IDE EFFECTS: Occasional local reactions: rebound congestion, light burning or stinging, sneezing, dry nose. Occasional systemic ffects: headache, drowsiness, lightheadedness, insomnia, palpitaons. Overdosage in young children may produce profound sedation. OSAGE: **Adults:** *Nasal Solution*—2 or 3 drops in each nostril every to 6 hours. *Nasal Spray*—Squeeze rapidly once or twice in each nosril every 4 to 6 hours. **Children under 12:** *Pediatric Nasal Solution*—or 3 drops in each nostril every 4 to 6 hours. One drop should be used in infants under 6 months. *Pediatric Nasal Spray*—Squeeze rapidly once in each nostril holding tube upright; repeat every 4 hours as necessary. SUPPLIED: OTRIVIN® hydrochloride (xylometazoline hydrochloride CIBA) *Nasal Solution*, 0.1%; dropper bottles of 1 fluidounce, bottles of 1 pint. *Nasal Spray*, 0.1%; plastic squeeze tubes of 15 ml. *Pediatric Nasal Solution*, 0.05%; dropper bottles of 1 fluidounce. *Pediatric Nasal Spray*, 0.05%; plastic squeeze tubes of 15 ml. *Nasal Solutions* contain either 0.1% or 0.05% xylometazoline hydrochloride, triethanolamine, hydrochloric acid, sodium chloride, and phenylmercuric acetate 1:50,000 as preservative in water. *Nasal Sprays* contain either 0.1% or 0.05% xylometazoline hydrochloride, potassium phosphate monobasic, potassium chloride, sodium phosphate dibasic, sodium chloride, and benzalkonium chloride 1:5000 as preservative in water. *Consult complete literature before prescribing.*

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linical results in patients probably much like those you see every uy show that an overwhelming majority responded favorably to antanol (sulfamethoxazole) Suspension.[1-12] These patients, numering over 1600 in published reports, had a variety of bacterial pper respiratory infections such as otitis media, sinusitis, pharyntis and tonsillitis, including over 700 cases caused by beta-hemotic streptococci.[1-7]

lthough in bacteriologically proven streptococcal infections penillin remains the drug of choice, Gantanol (sulfamethoxazole) has own conversion rates comparable to those generally seen with enicillin and apparently superior to those cited in the literature for ythromycin and broad-spectrum antibiotics.[1,2] Conversion rates ave ranged from a high of 96 per cent in 229 patients[2] to a low of 5 per cent in 105 cases.[3,4] When Gantanol (sulfamethoxazole) uspension is used in group A beta-hemolytic streptococcal infections, it is important to continue therapy in the recommended dose for at least 10 days. In addition, Gantanol (sulfamethoxazole) uspension has demonstrated antibacterial activity against *D. pneumoniae, H. influenzae* and *Staph. aureus*. Thus Gantanol (sulfamethoxazole) Suspension may be considered a practical choice for mmon bacterial U.R.I., as well as an effective alternative in the enicillin-sensitive patient with proven beta-hemolytic streptoccal infection.



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Such favorable results as those cited in the literature[1-12] are even more meaningful in view of the fact that only 27 of 1961 patients (1.4%) discontinued therapy because of side effects. Of the total side effects reported in 107 patients (5.5%), most were mild and included rash, urticaria, itching, dizziness, headache, diarrhea, nausea and vomiting, shivering sensation, skin discoloration and crystalluria.[1-12]

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Acute and chronic respiratory and urinary tract bacterial infections due to susceptible microorganisms. At present penicillin is considered the drug of choice in acute group A beta-hemolytic streptococcal infections; however, Gantanol (sulfamethoxazole) has shown an effectiveness approaching that of penicillin in a large number of patients. If employed in such infections, *it is important that therapy be continued in the usual recommended dosage for a period of at least 10 days.*

Contraindicated in sulfonamide-sensitive patients, pregnant females at term, premature infants or infants during first 3 months of life.

Warnings: Use only after critical appraisal in patients with liver damage, renal damage, urinary obstruction or blood dyscrasias. If toxic or hypersensitivity reactions or blood dyscrasias occur, discontinue therapy. In intermittent or prolonged therapy, blood counts and liver and kidney function tests should be performed. Data insufficient on prolonged or recurrent therapy in chronic renal diseases of children.

Precautions: Observe usual sulfonamide therapy precautions, including maintenance of an adequate fluid intake. Use with caution in patients with histories of allergies and/or asthma. Patients with impaired renal function should be followed closely since renal impairment may cause excessive drug accumulation. Occasional failures may occur due to resistant microorganisms. Not effective in virus or rickettsial infections.

Adverse Reactions: Following may occur: headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, Stevens-Johnson syndrome, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Dosage: Children—1 teasp./20 lbs initially, followed by ½ teasp./20 lbs b.i.d. *Adults*—4 teasp. initially, followed by 2 teasp. b.i.d. or t.i.d., depending upon severity of infection.

How Supplied: Suspension 10%, 0.5 Gm sulfamethoxazole/5 cc teasp., cherry-flavored, bottles of 16 oz.

References: 1. Braden, B., and Colmore, J. P.: *J. Oklahoma M.A., 57*:7, 1964. 2. Alban, J.: *Am. J. Dis. Child., 109*:304, 1965. 3. Reichelderfer, T. E.: *Clin. Med., 71*:1045, 1964. 4. Jackson, H.; Cooper, J.; Mellinger, W. J., and Olsen, A. R.: *Southwestern Med., 44*:246, 1963. 5. Braden, B.; Colmore, J. P., and Cummings, M. M.: Antimicrobial Agents Annual—1960, p. 54. 6. Peters, J. H.: Data adapted from a Scientific Exhibit presented at the Spring Meeting of the American Academy of Pediatrics, April 26-29, 1965. 7. Peters, J. H.: Antimicrobial Agents and Chemotherapy—1961, p. 406. 8. Elia, J. C.: *Eye Ear Nose & Throat Month., 41*:722, 1962. 9. Patton, J. M.: *West. Med., 5*:46, 1964. 10. Chastain, P. J.: *J. Florida M.A., 48*:816, 1962. 11. Grater, W. C.: *Antibiotics & Chemother., 12*:450, 1962. 12. Exline, A. L.: *Colorado GP, 5*:(5),11, 1963.

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*Marks, V., and Dawson, A.: Brit. M. J. 1:293, 1965.



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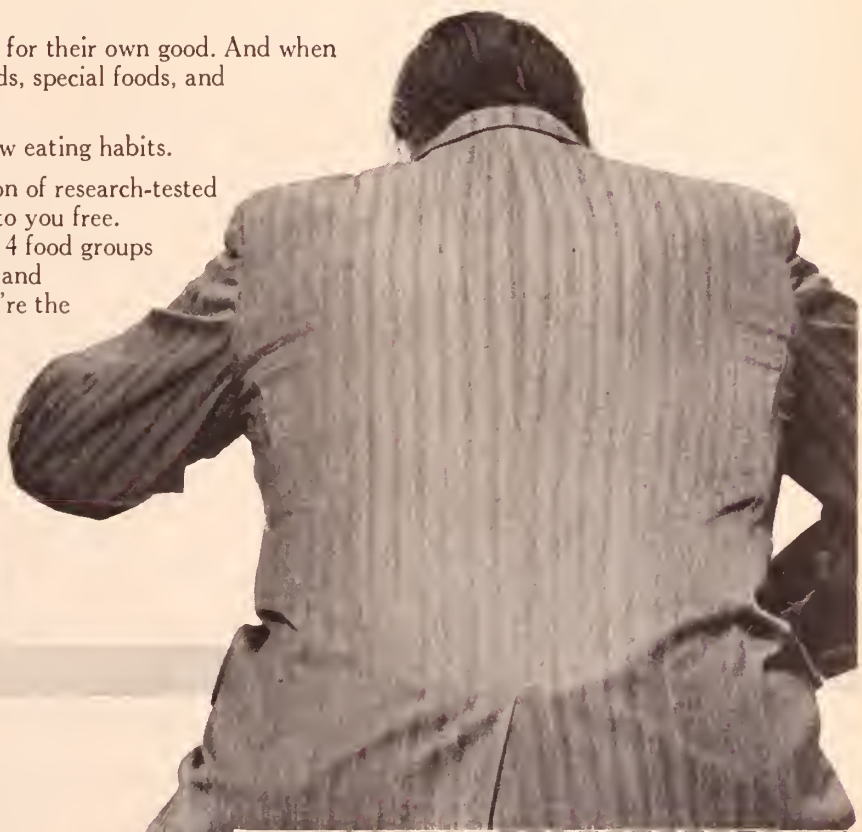
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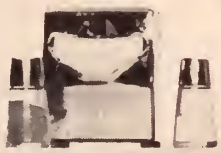
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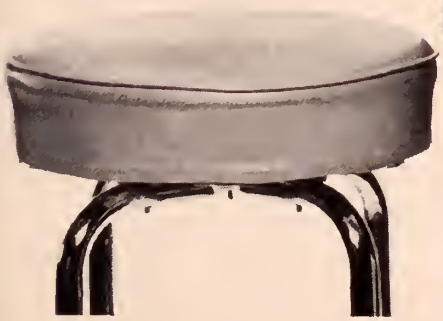
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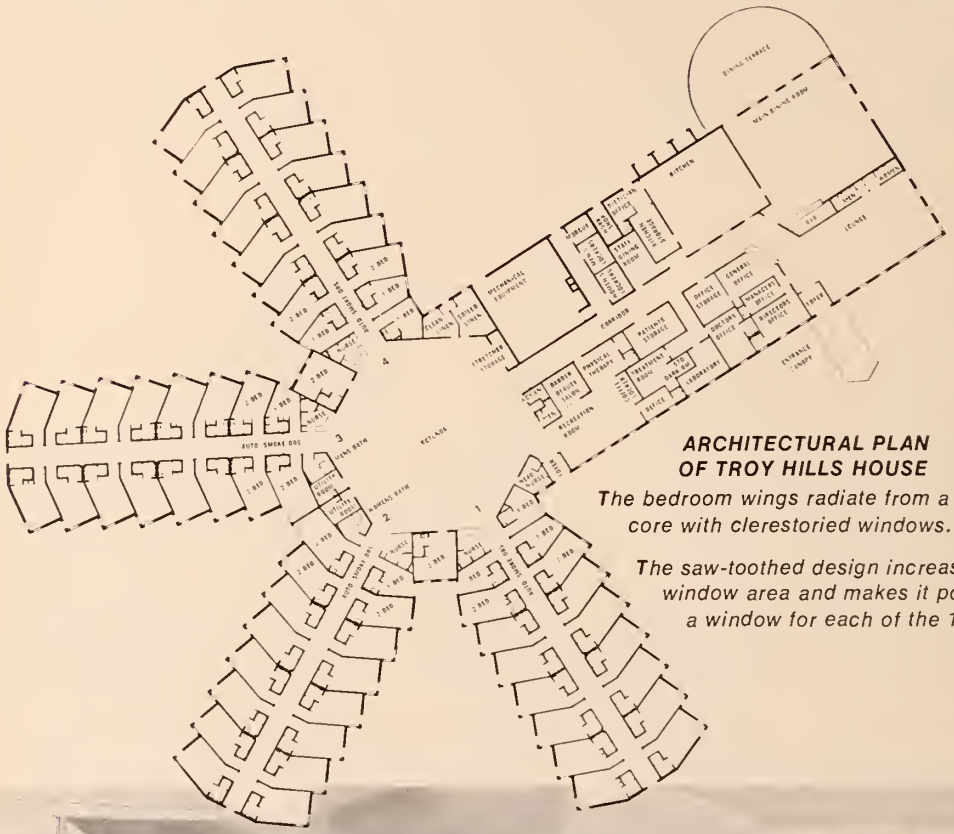
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WHY—

AFTER NEARLY 6 YEARS OF HOLDING THE LINE NEW JERSEY BLUE SHIELD HAS TO HAVE A RATE INCREASE

Medical-Surgical Plan of New Jersey—which has not increased its rates in nearly six years—finally had to ask the Commissioner of Banking and Insurance for a premium increase under its basic Subscription Certificate.
Hospital Service Plan of New Jersey—our companion Blue Cross Plan—is not involved in the rate rise.

This is only the fourth rate increase sought by Blue Shield in over 24 years, since the Plan was founded. It will not affect the rates of extended benefit Riders, Medicare Complementary Programs for members aged 65 or over, Student Program, or special contracts, such as State and Federal Employee Programs, and experience-rated national accounts, which are currently rated, paying as they go on the basis of usage experienced by the group.
While Blue Shield has been holding the line on rates since 1961, several things have been happening.

People Have More Coverage. In the past 6 years, new benefits have been added to Blue Shield coverage . . . such as routine care of healthy newborn children, and various types of dental surgery in the hospital. Other benefits have been broadened to keep pace with medical advancement, for instance, introduction of an open heart surgery "package," and increased coverage of accidental injury treatment outside the hospital. Not one penny of additional premium has been charged for these.

People Are Making More Use of Their Coverage. Members' use of their Blue Shield protection has been going up, every year. In 1965 the number of cases paid, per thousand members, was 14% higher than in 1961. This has cost Blue Shield more, in dollars paid out in benefits per average member.

The Economy Has Been Spiralling Upward. No one needs to be reminded that the cost of virtually everything has gone up since 1961 . . . except the cost of Blue Shield protection. Even a non-profit organization has an operating overhead . . . though Blue Shield's is only 8.8% . . . and the Plan has had to pay more for its goods and services over the last five years, as well as paying more adequately for services rendered to members. Meanwhile, people have continued to pay the same rates for Blue Shield protection . . . protection that has been periodically upgraded.

Doctors' Services Are More Adequately Compensated. Until last year, there had been no general increase in Blue Shield allowances for doctors' services for seven years. Blue Shield fees fell behind those of neighboring non-profit plans, as well as the general medical economy. The Plan could not expect its Participating Doctors to continue accepting substandard payments and still extend Blue Shield's valuable paid-in-full service benefits to qualified members. Consequently, overdue adjustments were made in the fee schedule on October 1, 1965, which not only benefit subscribers who qualify for service benefits . . . by encouraging continued wide participation by doctors . . . but which also help subscribers in the higher income levels, by paying a larger portion of their medical bills.

What It All Adds Up To:

The simple economic fact is this: You can't pay out more than you take in.

Blue Shield has been forced to do this for some time, under existing rates.

It has been able to do so only by using up its reserves—funds used to pay benefits when payments exceed premium income.

But as of October 1, Blue Shield's reserves were just about exhausted—reduced to the equivalent of less than one day's operations.

These are the reasons why Blue Shield had to have a rate increase.

It could not continue to provide today's—and tomorrow's—protection at 1961 prices.

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CONTRAINDICATIONS: Hypertension, advanced arteriosclerosis, coronary artery disease, cardiac arrhythmias, peripheral vascular disease, states of undue restlessness, anxiety, excitement, agitated depression, hyperthyroidism, idiosyncrasy to amphetamine, concomitant administration of a monoamine oxidase inhibitor. PRECAUTIONS: Use with caution in individuals with anorexia, insomnia, vasomotor instability, asthenia, psychopathic personality, a history of homicidal or suicidal tendencies, and individuals who are known to be hyperreactive to sympathomimetic agents, or emotionally unstable individuals who are known to be susceptible to drug abuse. Certain monoamine oxidase inhibitors may potentiate the action of Obetrol. SIDE EFFECTS: The most common side effects attended with the use of amphetamines include nervousness, excitability, euphoria, insomnia, dryness of mouth, nausea, vertigo, constipation, and headache. DOSAGE AND ADMINISTRATION: Initial adult dose is one-half to one 'Obetrol-10' tablet daily, preferably one-half to one hour before meals. This may be gradually increased to one 'Obetrol-10' or 'Obetrol-20' tablet one to three times daily as indicated. SUPPLIED: Tablets scored, in bottles of 100, 500, and 1000.

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Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution patients who operate machinery or motor vehicles that drowsiness may result.

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Since the discovery of chlorothiazide, the trend has been away from short-acting, multiple-dose, high-cost diuretics. With Hygroton you can usually do the job with just one tablet a day, or every other day.

More than any of the newer diuretics, Hygroton brings dosage and cost of medication down to earth.

*Brest, A. N., et al.: J. New Drugs 5:329, 1965.

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EDITORIALS

English: The Premier Language of Science

In 1965, in the field of the biosciences, more articles were written in English than in any other language. The runner-up, indeed, wasn't even close. Some 24 per cent of the world's science papers were in English, while the number 2 language, Russian, accounted for only 11 per cent. Spanish came third with 8 per cent.[1] German was the language of original publication of only 7½ per cent of the papers. Apparently, Germany has still not fully recovered from the Nazi war against the intellect.

The world primacy of English is a fact which we, whose mother tongue it is, take for granted. Yet logically, why should this be? How can any language with our absurdities of spelling and pronunciation have become the world's number 1 vehicle of communication?

In 1750, French was spoken by more people than any other language in the world. German, Spanish, Russian, and Italian came in that order, so that English was then outranked by five other languages.[2] But in 1965, more than 350 million people were using English as their primary tongue, and another 650 million were able to communicate adequately in English. As a result, our language is understandable to almost a billion people: surely the greatest success story in communication since Latin was abandoned as Europe's *lingua franca.*[3]

It would be simple and flattering to say that English has pushed into every continent of the world merely because of some special genius within the Anglo-Saxon stock. However, no race or people has any such monopoly. The diffusion of English is due to the fact that it is a flexible language rather than an inflected one, that its grammatical structure is simple, and that one can learn it without being worried about masculine or feminine words, or trying to get adjectives to agree with the noun in gender, or remembering when to use the dative case.

It must be admitted that the wanderlust of the American tourist has helped spread our language, and that travelers' cheques seem to be engraved more often in English than in Flemish. But principal credit goes not to the travelers' cheques but to the amazing flexibility of our language. We use nouns as verbs (you can really *chair* a meeting, or *fiddle* while the town burns), and verbs as nouns (ever hear of a *teach-in?*), adjectives as nouns (the *good* die young, remember?), and nouns as adjectives (ever go to a *bachelor* party?). A little word like *off* can be an adverb (my stock is always falling *off*) or an adjective (when that happens, it's an *off* day) or a preposition (play *off* key) or even a verb (*off* with his head!). And the beauty of it is, you don't care, and probably don't know, whether you are using it as an adjective or a preposition. In English you use individual words like building blocks without worry about case, gender, or tense. ("Long time, no see" may be rejected by the purist as ungrammatical, but it does convey the idea.)

More than 70 per cent of the world's mail is written in English.[4] That simple statistic states the case eloquently. There are more radio programs in English than in all other languages put together! The newly developing, newly created nations of Africa mostly communicate with each other in English.

Then, too, English has an exceptionally rich vocabulary. There is a world of difference, subtle or crude, between "to like" and "to love," but you can't use different words in French, German, Spanish, or Italian. Both concepts are expressed by *aimer, lieben, amar* and *amare.* Then, too, English is more hospitable to and more readily naturalizes (Anglicizes or Americanizes) foreign words than any other language. Time was when you had to write in italics such alien imports as morale, habeas corpus, kibitz, and canyon. But not for long. They have slipped quietly into the main stream of English and seem to have found a

home with us. Thus, to say a courteous goodbye, the Semitic languages use "peace," which in their tongues is *sholem* or *salaam;* and English takes it up and transmutes *sholem* or *Salaam* into "so-long:" and in this breezy form it goes wherever American soldiers go (practically everywhere). "So-long" is first Americanized and then exported to the wide, wide world.

Sometimes we just take the word over—cipher, cruller, cavalry, cargo, checkers, and cyclone—from Arabic, Dutch, Italian, Spanish, Persian, and Greek respectively. It doesn't matter. They are all English words now.

Thirty years ago, Ogden[5] demonstrated that with a lean lexicon of fewer than 900 words, you could communicate adequately any idea you wanted, outside of advanced technologic or philosophic ones.[6] This would not be possible in a highly inflected or conjugated language, like Spanish or German.

Most of you who read these words will, like us, be native Americans for whom English is the mother tongue. But many of our readers were educated abroad; and that you can so fluently follow us is, in the first place, evidence of your own perseverance and intelligence. But it is also a tribute to the sophisticated, polished, and highly elastic language of ours—and yours. Barnett[7] quotes a Hindu by the name of Prem Bhatia, who is the Editor of *The Times*—of Delhi, India. This newspaper is printed in English. And Mr. Bhatia wrote: "We in India got rid of the British through the effective use of the English language. We quoted Macaulay and Edmund Burke and even Shakespeare."

Oh well, practically everybody quotes Shakespeare.

Bibliography

1. Survey made by *Biological Abstracts* of Philadelphia.

2. In all these calculations, Chinese is omitted. The major Chinese dialects are reciprocally incomprehensible to all but an educated upper crust. For most people in China, the understandable dialect is meaningful to perhaps 100 or 150 million. So little indigenous Chinese literature has been exported, that for all practical purposes, the language is immured in its country of origin and makes small impact on the science and literature of the rest of the world.

3. It is difficult to get accurate figures as to how many people speak a certain language. We have checked Frederick Bodmer's "Loom of Language" (New York, 1944, Norton), C. F. Hockett's "Linguistics" (New York, 1958, Macmillan), J. P. Hughes "Science of Language" (New York, 1961, Random House), Mario Pei's "Story of Language" (Philadelphia, 1949, Lippincott), Simeon Potter's "Language in the Modern World" (Baltimore, 1960, Penguin), and Lincoln Barnett's "Treasure of Our Tongue" (New York, 1964, Knopf), and have found no two sets of figures that agree. Median figures for the seven languages that carry the great bulk of the world's scientific literature would seem to shape up as follows—in millions of people for whom this is the primary tongue: (For reasons indicated in footnote 2, Chinese is omitted) English: 350; Spanish: 140; Russian: 130; German: 100; Japanese: 95; French: 65; Italian: 55.

4. Barnett, Lincoln: *The Treasure of our Tongue.* New York, 1964, Knopf. Page 7.

5. Ogden, C. K.: *Basic English.* New York, 1934, Harcourt-Brace.

6. We tried this out just for fun, and by using the verb "get" plus some of the other basic words, we found we could say "get better" (instead of improve), "get the better of" (instead of vanquish), "get him to go" (instead of eject him), "get up" (for arise), and such combinations as "get going" or "get your goat" or "get about" or even "I got him in the mouth" and so on and on. This is a minor illustration of the wonderful plasticity of our language.

7. Barnett, Lincoln: *The Treasure of our Tongue.* New York, 1964, Knopf. Page 38.

The Great Vitamin Passion

Sometimes the Food and Drug Administration seems to be impeding medical progress in its cautious attitude toward drug claims. But in its recent suggestion that claims for vitamins be put into low gear, the FDA is in line with thoughtful medical opinion generally. Vitamins are necessary for proper functioning of the body; and vitamins are constituents of foods in their natural state. Since a varied diet will provide the necessary vitamins, one wonders why a healthy person needs to have them on top of his regular diet. In plain English, there is no cogent scientific evidence that supplemental vitamins will provide pep or energy for a person who feels weak.

Under these circumstances, one wonders why the American people have had this prolonged love affair with vitamins. Sometimes one suspects that the "—in" ending has done the trick.

Potent alkaloids end in "—in," so the word implies potency. And the first syllables "vita—" suggest vitality. The combination is unbeatable — semantically, at least, if not pharmacologically. Again, this may be simply the advertising man's triumph of promise over performance. In a sense the vitamin is the world's most expensive placebo. Unless, of course, your patient happens to have xerophthalmia, beri beri, rickets, scurvy, or pellagra. "Vitamins can be poisons," Bean[1] reminds us, "if given long enough at excessive levels. Though vitamins have been used for an extravagant array of ills and ails not related to a lowered stock in the tissues, their one undisputed use is to correct a deficiency. If any virtue resides in other uses, it will be winnowed out of the vogue of therapeutic faddism which has overreached itself."

The layman has been enchanted by the vitality of the vitamin advertising campaigns. The physician, one assumes, knows better.

The Eternal Quack

"Physicians, as conservators of the public health, are bound to bear emphatic testimony against quackery in all its forms."

So said the American Medical Association's Clinical Convention in Philadelphia in December. The meeting was in Philadelphia, but the year was 1847!

From its very inception 118 years ago, the American Medical Association has been battling quackery and is dedicated to a continuation of this warfare against wasting the nation's health and its health care dollar . . . of fighting fraud at the beside of ill and desperate people.

The health quack is not so easy to spot these days. The stovepipe hat and the pitchman's hawking have gone. In their place are their space-age counterparts, the suave, sophisticated super salesmen with smooth manners.

These merchants of menace, more insidious and unscrupulous than ever, have many new products, diet fads, valueless food supplements, useless cosmetic devices and treatments, worthless "cures" for everything — even into the area of brain-damaged children and mental illness.

They bilk the undiscerning, the uninformed, the desperate, and the unsuspecting of all ages. The estimates of the costs of medical quackery have been responsibly put as high as a billion dollars a year. One authority has stated that "medical quackery each year costs more lives than all crimes in the United States."

It is this cost of life — and health — that has placed America's physicians in the front lines of the war on quacks. It is the insidious side effect of quackery with which medicine concerns itself — the delay in proper medical care that may cost life itself.

It is for this reason, too, that the medical profession is dedicated to education of the people about cultism, about any health sects that turn their backs on scientific medicine.

The House of Delegates of the American Medical Association said in 1933:

"Either the theories and practices of scientific medicine are right and those of the cultists are wrong, or the theories and practices of the cultists are right and those of scientific medicine are wrong."

And in 1961, it said:

"There can never be a majority party and a minority party in any science. . ."

After the quack or the cultist has extracted his pound of flesh — after the damage is done and after the sick have become the dying because of delay in proper care — scientific medicine is called upon to pick up the pieces.

Medicine has tried and will continue to try to do that job, too, but how much easier the job would have been — how many lives would have been saved — if. . .

[1] Bean, W. E.: *Drugs of Choice*, Walter Modell, M.D., Editor. St. Louis, 1964, Mosby. Page 128

ORIGINAL ARTICLES

Hypophysectomy for diabetic retinitis is a radical procedure, but in experienced hands it can prevent blindness.

Hypophysectomy In The Treatment Of Intractable Diabetic Retinitis

Report of a Case

Maurice B. Gordon, M.D./Ventnor

The following case appears to confirm the value of pituitary ablation in conserving the sight of patients who (prior to the development of this technic) frequently faced complete blindness. The practitioner (and certainly the ophthalmologist) has often observed the diabetic — in many instances a "mild" case — who had been poorly controlled for a long interval. This patient may then suffer bilateral retinal destruction and blindness. Hitherto, no ocular help was available for him even though the diabetes was eventually well controlled.

Evidence has been presented from the Lahey Clinic Foundation and the Joslin Clinic† that proliferating diabetic retinopathy can be arrested and even reversed in many patients by total or subtotal hypophysectomy and to a lesser and less lasting extent by pituitary stalk section.

Recently, Fager[1] reported on 52 patients followed up for from six months to four years as follows: 14 of the 23 patients (61 per cent) whose pituitary glands were removed showed vision improved to 20/70 or better; only 10 of the 29 patients (34 per cent) with pituitary stalk section evidenced this much improvement.

This report concerns a vigorous, successful contractor — a prominent athlete engaging in competitive boat races as late as 1964, when he was fifty-one years of age. A positive glucose tolerance test had been elicited as early as 1947. I first saw him on May 18, 1961 when his fasting blood sugar was 280. On August 28, 1961, the fasting blood sugar reached 320 (the highest value obtained from this date to the present time). Hyperglycemia was readily controlled at first with diet and tolbutamide [Orinase®]; later with diet alone. After many months the patient returned with hyperglycemia comparable to the original levels. Irregularly controlled diabetes mellitus continued until September, 1963. The patient's neglect of his pathologic carbohydrate metabolism was largely due to a false sense of security because of a high renal threshold with negative urine sugars when the blood glucose was markedly elevated; and by the fact that he always felt in robust health.

Diminished vision was first noted on the left in September of 1963 with frequent episodes of amelioration and exacerbation. He came in after a year's lapse on September 3, 1963 with

† In conjunction with Dr. Searle Rees of the Clinical Research Unit, Diabetes Foundation, Inc., Boston.

[1] Fager, Charles A., Report to Harvey Cushing Society, meeting in New York, New York, May 27, 1965; subsequently validated in personal communication to the author.

a fasting blood sugar of 250, a blood pressure of 228/110, and a weight of 228 pounds. His only complaint was failing vision. "I feel fine in every other respect." Since this date, with constant fear of blindness the patient was completely cooperative in accepting proper treatment. The sugar was brought rapidly under control with protamine zinc insulin and diet and by December 16, 1963, the diabetes was readily controlled by diet alone. The blood pressure on this date was 148/90, and the weight 188 pounds.

In September of 1964 the patient noted deterioration of vision of the right eye. On October 19, 1964 Dr. Edmund B. Spaeth reported:

"*Right eye:* One large dish-shaped hemorrhage in the nasal retina; many punctate aneurysmal varices scattered about; exudates scattered about, largely in the macula; diabetic retinopathy is extensive, though various aspects of his diabetic retinopathy are, of themselves, not coarse."

"*Left eye:* Entirely different picture; on the nasal half of the nerve head is a mass of new blood vessel formation, all very fine vessels with proliferation, sharply localized and extending forward into the vitreous; in addition, in the nasal periphery along large retinal vein, there is a long cuff of proliferating retinopathy; here, also, are many fine aneurysmal varices with tiny punctate hemorrhages."

In March 1965 the patient, then aged 52, was referred to Dr. Robert F. Bradley of the Joslin Clinic in Boston who noted diminished vision and bilateral hemorrhagic retinopathy. He observed that the fundus of the right eye revealed faint residual haze with new vessels on the disc along with scattered hemorrhages and exudates, and a suggestion of a tuft of new vessels just below and temporal to the right macula. The left fundus exhibited a good deal of residual vitreous hemorrhage covering the disc and macular regions. Urinalysis and blood counts were then normal. Fasting blood sugar was elevated to 112 with a rise after 75 Grams of Glucola® to 225. This indicated decreased carbohydrate tolerance. A diet of carbohydrate 149, protein 97, and fat 71 Grams was started.

The patient was considered a suitable candidate for pituitary ablation because of the progressiveness of his diabetic retinopathy, in spite of the control of his diabetes, and because the retinopathy had not advanced to complete lack of macular vision in both eyes. This, if present, would have precluded any possible benefit from hypophysectomy. He also fulfilled the following essential clinical criteria: There was no evidence of severe or sustained cardiovascular hypertension or coronary insufficiency. The blood urea nitrogen was physiologic. Creatinine clearance was in excess of 40 milliliters per minute. There was no anemia of renal origin. The patient was deemed to have adequate emotional stability to withstand the surgical trauma, the metabolic effects of the hypopituitary state, and the uncertainty of its effect upon his vision.

Proton beam irradiation of the pituitary gland was rejected because the rapid retinal decline of the patient did not afford the months needed to evaluate this procedure. Also, with such irradiation, the amount of pituitary destruction cannot be accurately regulated or estimated. Hypophysectomy was preferred to stalk resection because of the greater success, both temporary and lasting, of the more radical procedure.

Fager[1] had noted that patients with stalk resection or partial ablation, whose retinal hemorrhages had resorbed and then regressed with recurring hemorrhages and diminished vision, almost without exception presented positive evidence of restored pituitary function.

The right frontal craniotomy and hypophysectomy was done on April 20, 1965 at the New England Deaconess Hospital by Dr. Charles A. Fager. Pathologic examination of the pituitary was negative. Postoperatively the P.B.I. declined to 2.4 micrograms per cent and the radioactive iodine uptake to 1.1 per cent.

Following surgery the left lung sustained partial atelectasis, and deep breathing exercises in conjunction with Chloromycetin® were prescribed. The sputem revealed monilia with no active bacterial infection, but it was felt that the antibiotic was clinically helpful. Except for some mental confusion, the patient had a smooth postoperative course with minimal diabetes insipidus and only mild postural hypotension, which responded

to a small dose of Florinef® and the adding of bouillon to the diet.

The diabetes mellitus exacerbated mildly with blood sugars reaching the high 100's. This was readily controlled first by *lente* insulin, then tolbutamide, and finally by diet alone.

On May 3, 1965 Dr. William P. Beetham reported that the left eye remained unchanged, with counting fingers at a few feet (as compared to his examination of the patient on April 14, 1965). He noted that the vitreous was full of blood and that no fundus detail could be seen. Hand movements could be seen in all four quadrants. He further recorded:

"Visual acuity with the left eye is recorded as 6/30, and this is the same as previously recorded. There are opacities in the vitreous and visible hemorrhages in the vitreous. Strands of retinitis proliferans can be seen as before. There are scattered hemorrhages of various sizes. Possibly the hemorrhagic factor is a little less than before surgery, but this may be questionable. Today, there seems to be a loss of the right lower field to confrontation. The fine vessels can be seen on each iris with the slit lamp, the same as before surgery."

The patient was discharged on May 6, 1965 on Cortisone,® Ferro-Sequels® (because of postoperative fall in hemoglobin), Varidase®, and Florinef.® Diet consisted of 149 Grams carbohydrate, 79 Grams protein, and 70 Grams fat.

On May 27, 1965 the patient sustained a fresh hemorrhage in the right eye which subsided within a few weeks.

On June 10, 1965 P.B.I. was 2.8 micrograms per cent, hemoglobin was 14 Grams, and fasting blood sugar was 88 milligrams per cent with a negative urine. Cortisone,® Florinef,® and Varidase® were continued and injections of testosterone cypionate and multi-vitamins were reduced to one on alternate weeks to minimize excessive sodium retention.

The patient was rehospitalized in September 1965. Chief complaints then were lack of energy and lack of libido. He stated that there had been a good deal of improvement in right eye vision since hypophysectomy, and also some improvement in the peripheral vision in the left eye. When in a prone position, vision in the right eye would become temporarily obscured. This could be corrected quickly by sitting upright.

Major changes in his physical condition were due to myxedema: puffiness of the face, hoarseness of the voice, and some swelling of the feet. Blood pressure was 130/80 and pulse 84. The myxedema was corroborated by a P.B.I. of 2.8 and B.M.R. reading of minus 32. A radioactive iodine uptake was 1.9 per cent.

Dr. Beetham noted: "Examination of the right eye revealed considerable clearing of the vitreous; however, there was old vitreous opacity in the inferior nasal quadrant. The superior quadrant seemed clear. The disc was no longer blurred and there was marked regression of the capillary network in the superior, superior nasal, and superior temporal areas of the fundus. New vessels extended across the disc margin at 10 o'clock but were not elevated into the vitreous. There was a small flame hemorrhage along the inferior nasal vein and the superior nasal vein. In the inferior fundus there was a fluid preretinal hemorrhage which when the patient was placed on his back extended up toward the disc and macula obliterating them. In the sitting position this hemorrhage rapidly regressed inferiorly. There was a modest number of exudates and microaneurysms. Examination of the left eye showed a good deal of hemorrhage still present inferiorly in the vitreous and the details of the retina could not be well seen."

The patient had shown general improvement of the angiopathy following hypophysectomy. The diabetes responded best to diet alone with all blood sugars in the normal range on a diet consisting of 132 Grams carbohydrate, 61 Grams protein, and 40 Grams fat.

The patient was started on Cytomel® to combat the myxedema. Other medications included: Florinef,® cortisone acetate, testosterone proprionate, and Varidase.® Testosterone cypionate was given once a month intramuscularly.

In October 1965 his vitality had improved with the thyroid replacement, and the only pathologic findings were those of the general clinical appearance of the hypopituitary state with blood pressures falling from 140/80 lying to 110/70 standing. The eyegrounds were relatively quiescent. The postprandial blood sugar was 114.

On November 5, 1965 visual acuity on the right was 6/15 (20/50) corrected to 6/7.5

(20/25) partly. On the left the visual acuity was as before being 1½/150. His right field of vision was checked and, while contracted, it was holding. The diabetic retinopathy in that eye seemed stationary.

As of April 27, 1966 Dr. Bradley noted that, as an unexpected bonus, the left-eye vision had improved from finger counting at 3 feet to 20/400 at least in the periphery.

On May 3, 1966 the patient sustained a rather sudden impairment of vision in the right eye. Dr. Spaeth noted a fresh pre-retinal hemorrhage of the right eye, swinging over the nerve head on the right and coming down, similar to a curtain, over the nerve head and the nasal portion of the macular area. The absorption of this new hemorrhage was astonishingly rapid. By May 18, 1966 the vision of the right eye had returned to 6/12 (20/40) partly. On June 29, 1966 the vision of the right eye was 6/12 (20/40) partly and that of the left was 2/60. There were no fresh hemorrhages and the fundus of the right eye was remarkably good considering the patient's medical background.

I saw the patient again on April 4, 1966. Blood pressure then was 126/77. Fasting blood sugar was 110. His emotional depression had lifted. He felt that his vision was improving markedly, stating that the previously experienced episodes of waning vision had disappeared altogether. He said that in recent weeks his general vitality had greatly improved, that his sexual potency had returned vigorously, and that, if he had his chance over again, he would have submitted to this radical surgical procedure at a much earlier date.

It should be emphasized that a superb team is essential to handle diagnosis, to make the judgment as to whether pituitary ablation is indicated in the individual patient, to handle the surgery, and to prepare the patient preoperatively and regulate his therapy postoperatively. The team must include a diabetic or metabolic unit, an experienced ophthalmologist (who must decide whether there is probability of saving the macula), a highly specialized neurosurgical team, and a neurosurgically oriented anesthetist.

Summary

The case of a 52-year-old male patient who underwent hypophysectomy for intractable diabetic retinitis proliferans is presented to illustrate the sight-saving hope afforded by this new method of treatment.

The author is most grateful to Dr. Robert F. Bradley and Dr. Charles A. Fager for personally going over this report and offering their valuable suggestions.

6917 Atlantic Avenue

New Rules On Aspirin For Children

After July 1, 1967 no bottle of children's aspirin will contain more than 36 tablets . . . and no tablet will be larger than 1¼ grains. This is part of a joint government-industry effort to reduce accidental overdosage. This restriction was one of several steps announced jointly by the Food and Drug Administration and 32 drug firms after a conference aimed at curbing childhood deaths and illnesses.

Also, by July 1 a bottle of children's aspirin will contain this cautionary label:

"Precaution: No cap is 100 per cent childproof. In case of accidental overdose, notify physician immediately."

Also agreed on was a limitation in the potency of children's aspirin. Some now range as high as 5 grains a tablet. The new limit will be 1¼ grains.

Some bladder cancers are not recognized by conventional cystoscopy. Ultraviolet cystoscopy offers a new and promising tool.

Occult Cancer Of The Bladder*

Its Detection by Ultraviolet Tetracycline Cystoscopy

Irving M. Bush, M.D./Chicago, Illinois
Willet F. Whitmore, Jr., M.D./New York

Most patients with urinary symptoms due to bladder tumors also have neoplasms grossly evident on cystoscopy. In a minority of patients, however, the tumor is not so easily seen and is, in a sense, an "occult" growth. Conventional light cystoscopy reveals only apparent inflammatory change or, in some instances, no abnormality. The observation[1,2,3] of fluorescence in tumors viewed under ultraviolet light after the administration of tetracycline has supplied the basis for investigation of the value of ultraviolet tetracycline fluorescence in the cystoscopic detection of occult bladder tumors. Previous experience[4,5] has demonstrated that some patients without grossly visible tumors will show areas of ultraviolet tetracycline fluorescence in apparently inflamed or normal bladder mucous membrane which on biopsy proves to be carcinoma. Thus, ultraviolet cystoscopy supplements conventional light cystoscopy in the detection of bladder neoplasms.

This is a report of ultraviolet cystoscopy† in 142 patients. Twenty-one patients were included in an initial report[4] of this technic and fifty others were presented in a follow-up experience with a more practical instrument.[5] Seventy-one additional patients have been examined with an improved instrument.[6]

Method

Patients with vesical symptoms or a history of previous bladder tumors are given tetracycline orally, 250 milligrams every six hours for three to four days, or 500 milligrams every six hours for one and a half to two days. The drug is discontinued 24 to 36 hours prior to examination. Between September 1962 and October 1965, 164 combined visible and ultraviolet light cystoscopies were performed on 142 patients at the Memorial or James Ewing Hospitals.

The usual method is to examine the bladder with the unfiltered light and with the neutral density filter, categorizing the findings as fol-

* Read by invitation at the Annual Meeting of The Medical Society of New Jersey, May 16, 1966. Dr. Bush is, at present, chairman of the Department of Urology at the Cook County Hospital in Chicago. The instruments used in this study were designed and made by the American Cystoscope Makers, Inc., while the Achromycin V was generously supplied by Lederle Laboratories at Pearl River, N.Y. This project was supported in part by N.C.I. Grant CA-08748.

†The new instrument used in the last seventy-one patients consists of a standard #24 French Brown Buerger convex cystoscope sheath (ACMI-#135) containing the equivalent of a 5 millimeter in diameter ultraviolet transmitting glass-on-glass fiber rod. The distal ends of the fibers are drawn out into the shape of a horse-shoe, partly surrounding the objective of the telescope. Two #13 French right angle examining telescopes are used, one with a regular eye piece and one with a Corning glass (No. 3-72) sharp cut, yellow filter eye piece. The instrument is connected to the mercury arc UV fiberoptic power supply light source (ACMI-FCB 200) by a three foot ultraviolet transmitting fiber bundle. A four stop slide filter is interposed between the bundle and the proximal fitting of the cystoscope and provides: (1) no filter; (2) a Bausch and Lomb 0.6 neutral density filter permitting 25 per cent transmission; (3) a 1.5 millimeter Corning glass (No. 7-51) filter transmitting a mixture of white and ultraviolet light; and (4) a 3.5 millimeter Corning glass (No. 7-51) filter transmitting only ultraviolet light.

lows: (1) normal mucous membrane, when no deviation from the normal is evident; (2) nonspecific inflammatory change, when such features as edema, granularity, increased vascularity, or redness are observed, either alone or in various combinations; and (3) frank neoplasm, when gross features of tumor are evident.

After observation with white light the 3.5 millimeter Corning glass (7-51) filter is interposed in the system absorbing all radiation above 430 nm†† and transmitting the main mercury spectrum lines of 366 nm†† and 404 nm.†† Inspection of the Bladder under these conditions of light transmission is carried out with the standard telescope and with the telescope with the Corning glass (#3-72) eye piece. The latter eliminates some of the visible light energy used for exciting the fluorescence, yet transmits the induced fluorescent energy (520 nm)†† of any tetracycline localized in the bladder lesions at the time of cystoscopy. Biopsies are then taken of suspected tumors and also of any fluorescent areas, whether the latter appear normal or inflamed with visible light.

Results

In 164 combined cystoscopies performed in the 142 patients (Table 1), a total of thirty-five areas of occult carcinoma in twenty-one patients were identified as a result of tetracycline ultraviolet fluorescence in bladder mucosa that appeared either normal or inflamed by visible light cystoscopy. Although these results are the accumulated experience of three separate studies utilizing three different instruments, they are sufficiently similar (Tables 1 and 2) to be discussed together.

TABLE 1.
TETRACYLCINE ULTRAVIOLET CYSTOSCOPY

Study	Patients	Newly Identified Cancer	False Positive Fluorescence
No. 1 (1964)[4]	21	9	2
No. 2 (1965)[5]	50	12	9
No. 3 (This paper)	71	14	10
Totals	142	35	21

TABLE 2.
TETRACYCLINE ULTRAVIOLET CYSTOSCOPY IN BLADDER CANCER

Studies	Patients	Newly Identified Cancers	Types of Cancer In situ	Superficial	Deep
Previous reports	71	21	11	4	6
Present study	71	14	8	4	2
Totals	142	35	19	8	8

Nineteen of the thirty-five lesions were *in situ* carcinoma, eight were superficial epidermoid carcinoma, and eight were deep epidermoid carcinoma.

In 129 of the 142 patients, material for pathologic study was obtained by transurethral resection, cold forceps biopsy, brush biopsy, segmental bladder resection, or cystectomy. Biopsies were generally taken of suspected tumors and of fluorescent areas whether the latter appeared normal or inflamed with visible light, but not generally of non-fluorescing normal or inflamed areas.

During the 164 cystoscopies, twenty-one instances of "false positive" fluorescence were proved by biopsy in fourteen patients: seventeen biopsies were epithelial *atypia* alone or with chronic inflammation, radiation "changes," necrosis, or ulceration; three were chronic inflammation only; one was necrotic debris. Nine of the "false positive" areas were immediately adjacent to areas of occult or overt carcinoma. In five bladders in which occult carcinoma was discovered, areas of "false positive" fluorescence coexisted elsewhere in each bladder.

In the 142 patients, 69 areas of grossly visible and pathologically confirmed bladder cancer were seen (Table 3). Four of the fifteen grossly visible areas of *in situ* carcinoma, one of the ten areas of superficial carcinoma, and seven of the forty-two areas of deep carcinoma did not demonstrate any fluorescence. The adenocarcinoma and the metastatic melanoma each fluoresced. Thus, twelve (17 per cent) of the 69 grossly visible and pathologically confirmed bladder cancers did not fluoresce.

†† The symbol nm equals 10 Angstrom units.

Before 147 of the 164 ultraviolet cystoscopies, urine for cytologic examination was obtained. *In no case where the cytologic report was negative was cancer found.* However, before six ultraviolet cystoscopies in four patients, cytologic examination was positive for malignant cells; yet no carcinoma could be identified.

Of the seventeen benign papillomas encountered, only four (in two patients) demonstrated areas of tetracycline ultraviolet fluorescence. Of the two patients with fluorescence, the first had had positive urinary cytology over two years of observation and the other had two large, necrotic, cellular papillomas with areas of epithelial atypia.

Comment

The utilization of the Papanicolaou technic for the examination of urinary sediment[7] and the urologic evaluation of patients with positive urinary cytologic findings indicate[8] that a bladder neoplasm may exist for months or even years[9] before the precise site becomes manifest. The retention of tetracycline fluorescence associated with tumors demonstrated by Rall and co-workers[1] in 1957 led us to investigate the possibility that some preclinical bladder neoplasms might be identified by this technic. In 1964, we studied the bladders of 21 patients with bladder cancer before and after cystectomy. With ultraviolet tetracycline fluorescence, we detected nine cancers not identified during visible light cystoscopy or gross inspection of the surgical specimen.[4] Encouraged by these results and by the development of cystoscopes[5,6] and panendoscopes[10] (which transmitted ultraviolet light into the bladder and urethra), the two subsequent investigations were done. There is a marked similarity in results among the three studies (Tables 1 and 2).

The incidence of occult *in situ* bladder carcinoma under various clinical circumstances remains to be determined. Although more cases of bladder cancer are being recognized[11] in patients with symptoms or cystoscopic findings of cystitis,[12] the possibility exists of an earlier phase of bladder cancer without symptoms or cystoscopic manifestations. Furthermore, the natural history of occult *in situ* bladder cancer must be well defined by systematic observation before therapeutic recommendations can be finally formulated. Such conceivably pre-malignant conditions as chronic panmural cystitis, cystitis cystica, cystitis glandularis, and vesical leukoplakia logically may pass through a phase of *in situ* malignant change before infiltrating cancer develops. Areas of *in situ* carcinoma have been observed in the grossly normal appearing bladder mucous membrane of patients with established bladder carcinoma. Bladder carcinoma ultimately develops[13] in 10 to 20 per cent of patients with benign bladder papilloma.[14] In each of these situations the incidence of *in situ* carcinomatous change has not been clearly defined, nor has the practical importance of such change to therapy been established.

The observations relative to ultraviolet tetracycline fluorescence must be interpreted in light of the following facts: (1) biopsies were taken from frank tumors whether or not fluorescence was evident; (2) biopsies were not generally taken from normal-appearing mucosa or from inflamed areas unless fluorescence was observed; (3) the possibility of a sampling error cannot be excluded in biopsies taken from fluorescent areas, since observations relative to fluorescence were made with the ultraviolet filter in the optical system while biopsies are usually taken under visible light; furthermore, the biopsy samples obtained were often small; (4) a positive urinary cytologic specimen was found in *all* patients with biopsy-proved cancer; but some patients with a positive urinary cytologic study and without grossly evident cancer did not demonstrate fluorescence.

Frank carcinoma: 57 of the 69 grossly visible and pathologically confirmed bladder cancers fluoresced (Table 3). There was no clear relation between the stage of cancer and the occurrence of fluorescence; but, whereas the fluorescence in the *in situ* lesions appeared diffuse, that in the bulkier infiltrating lesions

tended to be focal and to be more evident at the periphery of the lesions.

TABLE 3.
TETRACYCLINE ULTRAVIOLET FLUORESCENCE IN GROSSLY VISIBLE AND PATHOLOGICALLY CONFIRMED BLADDER CANCER**

Diagnosis	Number of Tumors	Positive Fluorescence	Negative Fluorescence
In situ Carcinoma	15	11	4
Superficial Carcinoma	10	9	1
Deep Carcinoma	42	35	7
Adenocarcinoma	1	1	0
Malignant Melanoma	1	1	0
Totals	69	57	12

**All 164 combined cystoscopies tabulated.

The erratic nature[15] of the occurrence of fluorescence is indicated by the fact that fluorescence was sometimes observed in one neoplasm in the bladder and not in a similar neoplasm in the same bladder. The role of total tetracycline dosage and duration of administration in the induction of fluorescence[16] remains to be fully investigated. In our experience, the median dose was four Grams in an average of four days. The reason for the occurrence of fluorescence in some frank tumors and not in others is not apparent. It does not seem to be a function of tumor size, multiplicity, previous therapy, grade or stage of tumor, age, or sex.

Papilloma: Fluorescence was observed in four of the seventeen biopsy-proved papillomas. One of the two patients demonstrating such fluorescence had two papillomas and had positive urinary cytologic evidence of cancer; the other patient had two papillomas, each of which revealed areas of epithelial atypia in addition to necrosis. The possibility exists that fluorescence observed in patients with benign papilloma indicates the concurrence of cancer somewhere in the same bladder, or the possibility of unrecognized carcinomatous change somewhere in the papilloma. The incidence of ultimate carcinomatous change in patients with papilloma makes this a question of some practical importance.

Apparently inflamed or normal mucosa: Biopsy of the 56 areas of apparently inflamed or normal mucosa demonstrating fluorescence revealed thirty-five occult bladder cancers (nineteen *in situ* cancers, eight superficial cancers, and eight deep cancers) and twenty-one areas of "false positive" fluorescence (Table 1). Of the latter twenty-one, seventeen were associated with some form of epithelial atypia. In two of the latter patients, overt carcinoma developed respectively, three months and six months later. The extent to which various degrees of epithelial atypism (with or without inflammation) are precursors of *in situ* or infiltrating carcinoma is uncertain, but the clinical concurrence of these different pathologic lesions may be regarded as circumstantial evidence of a relationship.

The immediate, as distinguished from the potential, applications of ultraviolet tetracycline fluorescence in the evaluation of patients with bladder tumors are: (1) as a supplement to urinary cytologic examination and visible light cystoscopy in the periodic follow-up examination of patients at more or less high risk of developing bladder cancer, including patients with a history of exposure to known bladder carcinogens, patients with known or presumed precancerous bladder disease, and patients with a previous history of bladder tumors, whether benign or malignant; (2) as a supplement to visible light cystoscopy in the evaluation of patients with known bladder tumors (as determined by cystoscopy and urinary cytologic examination); and (3) as an aid in the recognition of otherwise unsuspected areas of cancer occurring in apparently inflamed areas or in normal mucous membrane in patients with a positive urinary cytologic examination. The influence of identification of such areas of otherwise undetected cancer on therapy will not be elaborated but the implications are obvious. The possibility that other fluorescing substances, such as acridine orange[17] or hematoporphyrin,[18] may be as useful or more useful than tetracycline in studies of this type exists and is being investigated.[19]

Summary

The use of an ultraviolet cystoscope in the examination of a group of patients with blad-

der symptoms and bladder tumors has demonstrated the practical ability of the instrument and its usefulness in the recognition of some areas of cancer not recognizable with visible light. Application of these observations is discussed.

Bibliography

1. Rall, D. P. *et al.*: Journal of the National Cancer Institute, 19:79 (1957)

2. Sandlow, L. J. *et al.*: Annals of Internal Medicine, 58:409 (1963)

3. Sherman, H. H. *et al.*: Gastroenterology, 45:84 (1963)

4. Whitmore, W. F., Bush, I. M., and Esquivel, E.: *Cancer,* 17:1528 (1964)

5. Whitmore, W. F. and Bush, I. M.: Transactions of the American Association of Genito-Urinary Surgeons, 57:149 (1965)

6. Bush, I. M. and Whitmore, W. F.: "A New Fiber-optic Ultraviolet Cystoscope" (In press)

7. Foot, N. C. *et al.*: Cancer, 1:127 (1958)

8. Crabbe, J. G. S.: In the book *Tumors of the Bladder* (D. M. Wallace, Editor). London, England, 1959, Livingstone. Pages 56 to 76

9. Melamed, M. R. *et al.*: Cancer, 13:67 (1960)

10. Bush, I. M., Quint, R. H. and Wallace, F. J.: "A New Ultraviolet Panendoscope" (In press)

11. Melamed, M. R. *et al.*: Cancer, 17:1535 (1964)

12. Smith, J. C. and Badenoch, A. W.: British Journal of Urology, 37:93 (1965)

13. Marshall, V. F.: In *Bladder Tumors: A Symposium.* Philadelphia, 1956, Lippincott. Pages 1 to 8

14. Nichols, J. A. and Marshall, V. F.: *op. cit,* reference 13, Pages 24 to 25

15. Ackerman, N. B. and McFee, A. S.: *Surgery,* 53:247 (1963)

16. Loo, T. L., Titus, E. D., and Rall, D. P.: *Science,* 126:253 (1957)

17. McDonald, D. F.: Personal communication to the authors

18. Lipson, R. I. et al.: Journal of Thoracic and Cardiovascular Surgery, 42:623 (1961)

19 Ackerman, N. B. *et al.*: J.A.M.A. 191:115 (1965)

1825 West Harrison Street

Obesity: A New Look At An Old Look

Obesity has become a major health problem in the United States and a special health hazard for three obesity-prone groups, according to the Public Health Service.

Quoting a new PHS source book for health professionals, *Obesity And Health,* the Service said that the prevalence of obesity in this country is a source of growing medical concern because "fat people are more likely to develop certain diseases and to die at an earlier age than people of normal weight." Prime candidates for the development of obesity and its attendant association with certain serious disorders and possible early death, according to the PHS, are:

1. Children whose relatives are obese: In one study, 73 per cent of 1,000 obese patients had at least one obese parent.

2. Heavily built persons who also have corpulent tendencies: Obese individuals usually have a heavier physique than their non-obese counterparts. Large-boned and thickly muscled persons, particularly adolescents, who fit this description should be watched closely.

3. Persons who are becoming less active, more sedentary: Food intake does not decrease proportionately with decrease in energy expenditure. As activity decreases, for whatever reason, the risk of developing obesity increases.

The Public Health Service said that while a substantial amount of obesity exists at every age in both sexes, obesity in children and adolescents is a particularly discouraging omen for the future.

"Obese children and adolescents are a major reservoir for obesity in adult life," the source book said. "They are more likely to remain obese as adults and to have more difficulty in losing fat and maintaining fat loss than people who become obese as adults."

A 100 percent mortality rate is reported for subphrenic abscess that is not surgically drained.

Subphrenic Abscess

L. Vincent Strully, M.D./Paterson

In spite of antimicrobial agents, good surgical technic, and superior postoperative care, subphenic abscesses are not uncommon. Although antibiotics of all kinds have been used, our mortality rate from these abscesses at St. Joseph's Hospital has increased. We find that the requirement of surgical drainage[1] has not been obviated. From 1943 to 1966, we had 42 subphrenic abscesses (Table I).

TABLE I
Primary Lesion Leading to Subphrenic Abscess

Peptic ulcer perforation	14
Associated with or following gallbladder surgery	8
Gastric resection	5
Acute appendicitis	5
Perforated viscus (other than ulcer)	3
Splenectomy	2
Gastrojejunostomy	1
Closure of transverse colostomy	1
Suprapubic cystotomy	1
Abdominal injury	1
Secondary to multiple liver abscesses	1
Total	42

Signs and Symptoms

Prior to the introduction of antibiotics, patients who developed a subphrenic abscess appeared to be critically ill. The antibiotics have changed the clinical pattern of the disease but they have not prevented the abscess. The patients look well or seem to have improved after the primary condition. Active bowel sounds (absent at the beginning of an abdominal suppurative process) reappear. The complaint of "just not feeling well," with malaise and a low grade fever, suggests only a minor complication. Often the leucocyte count and pulse are within normal limits or only slightly elevated. The signs and symptoms may remain suppressed for several days, then, escaping from the effects of the antibiotics, can occur rather suddenly. The patient, who seemed to be in good condition, rapidly becomes desperately ill. The presence of an air bubble under the diaphragm, postoperatively, has no significance. Should the air bubble increase in size, drainage is indicated.[2]

The earliest diagnostic sign is tenderness on pressure along the twelfth rib or the costal margin. This is demonstrated by pressing gently but firmly, not by pounding, over these areas. This, plus fever, leucocytosis, elevation of the affected hemi-diaphragm, and absence of motion of this side indicate a subdiaphragmatic abscess.

TABLE II
Spaces Involved (58 in 42 patients)

Right—74%	43
Left—17%	10
Right & Left—9%	5
Total	58

In our series of 42 patients, 9 were *not* treated surgically. The mortality was 100 per cent for the untreated. Thirty-three were drained with a mortality of 18.5 per cent. Overall mortality for the entire series was 38 per cent. Carter and Brewer[3] reported a surgical mortality of 31 per cent compared to 67 per cent with nonsurgical management. Halliday and Loewenthal[4] had an 18 per cent mortality where surgical drainage was effected. Dineen and McSherry[5] treated 63 patients with subphrenic abscess; they had 27 deaths — 45 per cent. All reports concluded that surgical drainage seemed to offer a greater chance of

TABLE III
The Outcome

	No. of Cases	No. of Deaths	Mortality %
Drained	33	7	18%
Not Drained	9	9	100%
Total	42	16	38%

survival than the use of antimicrobial agents alone.

In this group, the ratio of male to female was 1.7 to 1. X-ray studies corroborated the clinical diagnosis in 38 patients, and gave no findings in four. In these four, the subphrenic abscess was revealed at autopsy.

TABLE IV
Cultures (58 abscesses)

No. cultures taken	10
No. growth	10
Staphylococcus	5
B. Proteus	5
E. Coli	8
Streptococcus	3
Aerobacter Aerogenes	4
C. Welchii (?)	1
Friedlander Bacillus	1
Pneumococcus	2
Total	49†

Antibiotics were used in 39 of the 42 patients

Discussion

Since subphrenic abscess occurs with a certain amount of frequency and a fairly constant mortality,[6] it is the surgeon's responsibility to consider this possibility if evidence of pus occurs in the abscence of localizing signs. Elevation of temperature, increased pulse rate, general malaise, and appearance of toxicity suggest the need for diaphragmatic x-rays with fluoroscopy, and pressure on the twelfth rib and the costal margins. Usually these symptoms and signs appear about the fifth day after intra-abdominal surgery. The drainage, if done early, can be by the transdiaphragmatic, transpleural, or transabdominal approaches. Anatomically the subphrenic spaces can be approached through any of these passages. We have tried them all; we have found no one more suitable than another. Postoperative survival than the use of antimicrobial agents As these cavities shrink in size, the large tubes are replaced by narrower bore tubes. Should drainage persist, aqueous solutions of radiopaque materials are injected into the abscess cavity to check on size of the cavity and to determine any abnormal connection with the viscera.

† In some of these cases, there was more than one organism.

Summary

Because of a relatively constant number of subdiaphragmatic abscesses occurring over a period of years in a medium-sized general hospital, 42 patients with a total of 58 abscesses have been reviewed. The incidence, signs and symptoms, and treatment have been discussed. Mortality can be reduced by early surgical interference and with less dependence upon antibiotics and "watchful waiting." Surgically treated mortality was 18.5 per cent, while non-surgical mortality was 100 per cent.

Bibliography

1. Laslow, J. and Sachs, F.: JAMA, 152:213 (Feb. 1953)

2. Gerwig, H. H. Jr. and Blades, Brian: Ann. Surgery, 144:356 (March 1956)

3. Carter, R. and Brewer, L. A.: Amer. Jour. Surgery, 108:145 (August 1964)

4. Halliday, P. and Loewenthal, J.: Australian & New Zealand Journal of Surgery, 33:260 (May 1964)

5. Dineen, P. and McSherry, Charles K.: Ann. Surg., 155:506 (April 1962)

6. Fraser, Kenneth J.: Thor. Surg., 53:776 (July 1957)

7. Bondi F. R. and Erickson, E. W.: Amer. Jour. Surgery, 107:614 (July 1965)

8. Lawrence, G. H.: Bull. Mason Clinic, 16:1 (January 1962)

9. Diefendorf, R. O.: Pacific Med. and Surg., 72:327 (March 1964)

464 Broadway

Hip dislocations following spina bifida may often be corrected by the procedure here so carefully described.

Paralytic Dislocation Of The Hip Secondary To Meningomyelocele*

Marvin Chirls, M.D./East Orange
Anita Falla, M.D./Newark

Spina bifida occulta includes such abnormalities as absence of the fifth lumbar spinous process. This common disorder is rarely associated with neurologic abnormalities. *Spina bifida aperta,* on the other hand, is frequently associated with lower limb paralysis. Until recently, its prognosis has been poor. Few children born with spina bifida aperta had survived long enough to be treated for their paralysis. Changes in the management of spina bifida aperta have reduced the mortality from 94 to less than 40 per cent and have considerably diminished the associated paralysis.

The essential abnormality in spina bifida aperta is the absence of laminae, spinous processes, overlying muscle, and skin due to failure of development. The defect most commonly occurs in the lumbar spine and may vary in extent from the level of the fourth thoracic to the first sacral to one localized entirely at the lumbosacral junction. Occasionally, the spinal cord and its nerve roots are intact and only the covering membranes project through the overlying defect. This is the meningocele. More commonly, a meningomyelocele exists. Here the defect involves the membranes on the posterior aspect of the spinal cord and the spinal cord is opened out and presents on the surface as a plaque of nervous tissue.

It is the concern of this paper to discuss one aspect of orthopedic surgery which has been used at the Babies Hospital in Newark for the past year and successfully in England for the past seven years in the treatment of paralytic dislocation of the hip.

Paralysis of the gluteal muscles of the hip with active power still remaining in the flexor and adductor muscles presents one of the most serious orthopedic problems in these children (Group III of Sharrard). With this distribution of paralysis, dislocation of the hip is almost inevitable. It often recurs despite tenotomy and osteotomy. Even if reduction of the paralytic dislocation is finally secured, the child may still be unable to walk. All children brought in to Babies Hospital are tested pre-operatively for muscle power of the involved groups of muscles. Those who exhibit a particular pattern of muscle imbalance are then evaluated with consideration for surgery. It is felt that all neurosurgical repair of the meningomyelocele must be done before the orthopedist enters the picture. We, as in England, have followed the work of Sharrard.[2] Using his concepts of the various muscle groups involved, we have had success in treating these hips in paralytic children.

Posterior Iliopsoas Transfer

During the past year this operation has been done on fifteen children at the Babies Hospi-

* From the Babies Hospital in Newark. The patients have come from the National Foundation for Birth Defects at the Diagnostic and Treatment Center of the Babies Hospital. The authors here acknowledge the valuable assistance of Doctors Robert Ambrose, Arnold Feldman, Clement Furey, and Francis Wood for really invaluable assistance in treating these children.

tal. Complications have been few. There have been no deaths. One hip has re-dislocated because of an inadequate acetabulum, and there have been two superficial wound sloughs. Of the fifteen cases, twelve were females.

Severe muscle imbalance of the type seen in Group III is an absolute indication for this operation. The ideal time for this surgery is before the age of 2, because of the size of the child and the unnecessary use for prolonged physical therapy or rehabilitation since these children have never walked. There is no special pre-operative care given to these children as long as they have a full range of passive motion of the hips. The children are admitted to the hospital the day prior to surgery and are typed and cross-matched for blood. It has never been necessary to use more than 100 cubic centimeters of blood in any child operated upon.† All children have adductor tenotomies three weeks prior to surgery if they do not have a full range of motion. The adductor brevis, longus, gracilis, and adductor magnus are tenotomized.

Technic

The procedure is done somewhat differently from the way Sharrard[2] advocates. The largest amount of blood loss occurs while stripping off the gluteal muscles from the ilium. This is performed after the iliopsoas has been released from the lesser trochanter. The patient lies on an ordinary operating table, slightly tilted to the opposite side. A sand bag is placed beneath the hip to be operated upon. The skin of all patients has been prepared with Phisohex® and Betadine® and, as noted previously, there have been no wound infections. An incision is made along the anterior two-thirds of the iliac crest following the medial border of the sartorius down to the upper half of the thigh. Dissection is carried down to the deep fascia, and it is noted that there is a substantial amount of fat. The femoral nerve is then seen and the inguinal canal dissected cleanly. The femoral artery is visualized, and a plane between the artery and nerve is then developed. Once the iliopsoas has been located after ligation of the lateral femoral circumflex vessels, the iliopsoas is dissected free up toward the pelvis. The dissection of the thigh is made easier by abducting and laterally rotating the femur. The psoas muscle is followed distally as it passes over the hip joint and dives deeply toward the lesser trochanter.

Use a long right angle retractor to visualize the lesser trochanter once the lateral femoral circumflex vessels have been ligated. We have found the operation much easier with the ligation of these vessels, although Sharrard[2] states it can be done with intact vessels. Once the lesser trochanter is visualized with its attached portion of the psoas tendon, the muscle is detached with a small osteotome or a gouge. (We have met difficulties with using a meniscus knife.) The deeper separate insertion of the psoas is then divided and the psoas is mobilized up toward the pelvis with the bursa deep to it indicating the plane of separation. The fibers of the iliacus are then preserved, but the part of the iliacus fibers which are independently attached to the femoral shaft are cut at the level of the inguinal ligament.

The dissection is then directed up into the pelvis. The femoral nerve is separated from the iliacus and the psoas carefully preserving the nerve supply to the iliacus which usually arises by two branches. The hip is flexed to relax the femoral nerve so that the iliopsoas tendon and a portion of the lesser trochanter can be passed *beneath* the nerve to the lateral side. The origin of the iliacus is then detached extraperiostally from the inner border of the false pelvis by blunt and sharp dissection. Once this is done, the dissection is carried back to the anterior aspect of the sacro-iliac joint. It is at this point that the abductors are dissected from the lateral aspect of the ala of ilium. With an angled osteotome, a hole is made in the ilium immediately lateral to the sacro-iliac joint, and using a Raney rongeur the width of the hole is made slightly more than one-third that of the iliac wing. It should be oval and its length about half its width. It should lie with its long axis in the longitudinal plane. Care is taken to insure that both cortical layers of bone have been removed. The border of the hole is then coagulated and lined with bone wax. The iliopsoas tendon and the whole of the iliacus is then passed through the hole. The proximal portion of the iliacus is passed through first; following this the remainder of the muscles and tendons are passed through.

The new insertion of the iliopsoas is to be the posterior aspect of the greater trochanter. It is, therefore, necessary to dissect a small portion of the greater trochanter through the same incision. A finger is passed from the gluteal region distally and posteriorly into the bursa deep to the gluteus maximus. A small drill is used to start the hole with the thigh kept in medial rotation, and then a Paton burr enlarges the hole until it is big enough to receive the tendon. A strong silk or wire suture is attached by clove hitch to the fragment of lesser trochanter in the iliopsoas tendon. Following this, we use the special instrument which had been designed by Sharrard[2] to facilitate the passing of the tendon from behind forward through the bone. It is an anesthetist's metal suction tip with its distal end partly amputated and bent through a right angle. The whole instrument acts as a cannula. A stethescope ear piece may also be used with the same ease. A piece of wire is passed through the cannula and is used to pull the suture attached to the tendon through the cannula. The end of the tendon with its fragment of lesser trochanter is inserted just above and into the end of the cannula and the suture wound around a finger grip on the cannula or tightly held in the hand. In this way, tendon and suture are all fixed together in one piece. The cannula is then pulled through the tunnel and brought to the front of the greater trochanter. While this is being done, the hip is abducted and extended in neutral rotation. In most cases the tendon will come right through the anterior surface of the trochanter to which it can be fixed with several strong sutures. Failing to do this, the suture used to pull the tendon into the bony tunnel can be fixed to the tissues on the anterior aspect of the trochanter.

The tendon must be sutured under as much tension as can be reasonably attained. Care must be taken to insure that the line of the tendon passes directly from

† But be prepared with 500 cubic centimeters.



Figure 1. Subluxation of the left hip with dislocation of the right hip.



Figure 2. Postoperative bilateral iliopsoas transfer. The "x" shows the insertion of the iliopsoas into the trochanteric area. The "1" points up the hole in the ilium for passage of muscle.

the inside of the abdomen through the hole in the ilium to the greater trochanter. When the iliopsoas has been firmly fixed to the femur, the origin of the iliacus is then sutured to the ilium just below the iliac crest and in the position corresponding to the origin of the gluteus medius. In a young child it is convenient to use for this suture a trochar pointed needle that can penetrate the thin bone or cartilage of the iliac wing. After tendon fixation, the hip should be moved gently in abduction and adduction and flexion and extension in order to demonstrate that the psoas is moving correspondingly in the abdomen. Closure is then routine. One must be careful to insure closure of the inguinal ligament by suturing the inguinal ligament to the iliopectoneal line to avoid a femoral hernia. Following the closure, a plaster of paris hip spica is applied extending from the toes on the affected side to the rib cage with the hip joint in abduction and extension and in medial rotation.

In children with bladder paralysis, which includes almost all those with meningomyelocele, an area of the pubis must be left exposed in order to "crede" the bladder. It is a wise precaution to incorporate a bar between the front of the thigh pieces of the spica in order to prevent the plaster from collapsing early. All fixation is discarded in 3½ weeks in children of 2 to 3 years of age; at 4 weeks, in children up to 6; and at 4½ weeks, in children up to 10 years of age.

Post-Operative Care

After the procedure all children are watched as in any large operative procedure on a small child. We prefer not to use antibiotics. All children are kept on a hypothermia blanket if the temperature exceeds 102 degrees. Ice bags are used to cool the cast over the incisional site to prevent excessive swelling. All children, except one, have been discharged from the hospital within three days in plaster and then followed on an out-patient basis.

After removal of the plaster, the limb lies in abduction and extension to an extent depending upon the angle of the abduction that was necessary to allow the hip to be reduced. When there is considerable abduction, there is usually severe valgus deformity of the neck of the femur and valgus osteotomy is indicated at a later date. Once the hips have been satisfactorily cared for, corrections of foot problems are undertaken.

Results

Since we have been doing this operation for only one year, it is difficult to assess any final result. However, we note that these children now have hips that are not re-dislocating. They have good abduction and extension power. This operation has been done on one

child without dislocated hips who could not walk with a normal gait since her lower extremities were in external rotation with every step. This child now has a negative Trendellenberg test. She has a normal gait on one side and it is felt that this operation will be done on the other side as soon as possible.

Bibliography

1. Mustard, W. T.: Journal of Bone and Joint Surgery, 34:647 (June 1952); and 41:289 (February 1959)

2. Sharrard, W. J.: Journal of Bone and Joint Surgery, 41:622 (June 1959); and Archives of Diseases in Childhood, 38:18 (January 1963); and Journal of Bone and Joint Surgery, 46:426 (April 1964)

109 South Munn Avenue

Recruiting For Careers In Medicine

When parents and their teenage offspring begin pondering the merits of a career in medicine or one of its allied fields, it is only natural that they should turn to you, their physician, for advice and counsel. You must have experienced a mounting number of such personal requests in this era of unparalleled and steadily expanding opportunities in medicine and the entire health field. You can do both yourself and those making career inquiries a favor by looking to the AMA for a helping hand to augment your personal advice and suggestions. As a service to you, AMA offers a variety of complimentary literature and other aids describing guidelines for students seeking to prepare for rewarding careers in medicine or its allied fields.

Although the AMA has been conducting an extensive careers' program since 1960 to encourage qualified students to embark upon medical study, some physicians are not yet personally aware that literature is available to them without charge. Nor is the extent of this programming effort known. Interest in medicine and allied careers has snowballed to the point where the AMA currently handles up to 35,000 individual careers' inquiries annually from physicians, individuals in allied professions and occupations, members of women's auxiliaries, counselors, libraries, students, and parents. That is an average of 130 inquiries per working day. But during peak periods—October-November and March-April — when many schools and communities conduct special career programs, as many as 300 a day are received.

The AMA's latest contribution to health careers' literature is the colorful, 144-page paperback, *Horizons Unlimited,* introduced last April. Designed primarily for upper high school and beginning college students, and those concerned with counseling, the two-part publication covers medicine in depth and highlights career opportunities existing in eight major allied fields. Attesting to the popularity of this timely publication with physicians, counselors, students, medical schools, and others actively concerned with health careers' informational programming is the fact that more than 125,000 copies have been distributed in eight months.

Many physicians are distributing copies of this publication to members of Future Physicians Clubs or Medical Explorer Posts which they advise. Others have found it beneficial to place a copy or two in their reception rooms where it can call patients' attention to the fact that opportunities abound today in medicine and its allied fields because of the medical team's ever-expanding efforts to improve and expand health care services, and the public's increasing demand for more and better medical care.

For a supply of, a catalogue of, or samples of this material, write to Program Services Department, AMA, 535 North Dearborn Street, Chicago 60610.

Every pediatrician, G.P., internist, and family doctor may be presented with the "school phobia" problem. A child psychiatrist here reviews the situation.

School Phobia

Karolina Bein, M.D./Newark

It all starts like this: one day a child refuses to go to school. No amount of coaxing, pleading, or threatening helps. The desperate parents finally give up. They wait a day or two. There is no change in Johnny's behavior. Each morning is the start of a nightmare for the parents. Everybody's nerves are shattered. Mother cannot sleep, father loses his appetite, and Johnny is a "nervous wreck." Then they call the doctor.

The physician meets an anxious youngster, most likely one he has known for some time. The child is in good physical condition. Nothing organically wrong can be found, though often he has many physical complaints. Those will range from headaches to stomachaches (although anorexia is rarely present). All kinds of unspecific symptoms may be offered. Out of the collection, the physician will sort lightheadedness, slight dizziness, "butterflies in the stomach," muscular tension, enlarged pupils, and intermittent tachycardia with or without dyspnea — all of which spells an attack of anxiety. The anxiety is always described clearly and precipitated by the idea of going to school. Avoidance of school and attacks of anxiety — those are specific symptoms indicative of school phobia.

Phobia implies a state of anxiety, panic, or fear where no "real" danger exists and is dealt with by avoiding the fear-creating object. Physiologic manifestations of a panic state are: fast heart beats, enlarged pupils, often elevated blood pressure, sweating, rapid breathing, over which the patient has no control (stress reaction).

When a fear is attached to objects or situations which are (in the conscious mind of the patient) known *not* to be a source of danger, and when the patient reacts to them as if they were objects of extreme danger (that means he unconsciously associates them with danger), he can deal with this situation only by avoidance. He tries to stay away from what creates this anxiety. The phenomenon may occur through displacement — again, a mechanism operating on an unconscious level. That is, the individual takes a situation which really is threatening to him and attributes it to another situation. It appears as if "the school phobia" develops suddenly: just one day Johnny's refusal to go to school occurred and that was that. The original conflict that led to it, however, originated early in childhood. It was never resolved and was reinforced by conflicts between the child and parents.

This should be of particular interest to pediatricians, internists, and general practitioners, to whom the desperate parents will address themselves for help.

It isn't always a "school phobia" when a child refuses to go to school. School phobia has to be differentiated from six other situations as follows:

1. *Truancy.* Here there will be a specific age group and clearly defined secondary gains.

2. *Reactive anxiety* or depression to a crisis at home or other traumatic situation. This will disappear after the situation is resolved.

3. The first grader's *immaturity.* Give him a few months to a year and he will mature.

4. *Physical illness* in early stages that may not yet be recognized, such as tuberculosis, deafness, rheumatic fever, severe myopia, diabetes mellitus, infectious mononucleosis, and others which sap energy or interfere with the child's ability to comply with the demands of school attendance.

5. *Lack of motivation* for children from "deprived" homes.

6. Manifestations of apathy, generalized depressive inhibitions, and withdrawal from reality and surroundings that will spread to school and are characteristic of *schizophrenic reaction* or psychotic depression.

Differing from the above, a child with school phobia may react to the school situation alone. In the beginning phase of this disorder he may pursue other interests; e.g., go to a movie or to a party, with no anxiety or difficulty.

The most serious diagnostic problem is between school phobia and incipient schizophrenic reaction.

For the sake of making the differential diagnosis more clear this is an example of a first grader's immaturity. A girl of five and a half was seen initially at a Child Guidance Clinic because she just didn't want to go to school. As a part of the diagnostic interview, the child was asked to draw a picture of a girl and relate the girl's story. This was the story: "The little girl in the drawing was frightened about going to school because there would be no mother to help her if she were not able to tie her shoelaces and could not help her cross the street." Because of the unavailability of clinic time, the child could not be seen until six months later. The same diagnostic procedure was repeated and the story read: "This is a little girl who goes to school. She grew up a little since she first came to the clinic. She is bigger now and not afraid." Needless to say, the girl was going to school without trouble. The psychiatric impression of the child was, "Delayed emotional maturation in a first grader." In the truly phobic child, the fears cannot be this easily amended.

School laws dictate the age of separation even though there may not be an "emotional readiness" on the child's part. The chronologic age is not always synchronous with the emotional or physiologic age.

Although it may appear as a fear of school attendance (true in immaturity), "school phobia" is a neurotic disorder. It is, in essence, an anxiety reaction toward separation from home, from the dependency upon parental figures. This dependency upon parental figures is usually contaminated by conflicts and ambivalance.

Avoidance of school may occur in any month other than the typical opening date in September. It is often initiated by a crisis in the family which serves as the precipitating factor in the phobia. Prognosis is best at the onset of the symptoms. Most Child Guidance Clinics are aware of it and, if possible, are accepting the children on an emergency basis. School guidance departments usually give priority to consideration of the needs of these children. If not treated, school phobia has the tendency to spread to other aspects of the child's life or shift symptoms to prolonged and crippling somatization and/or conversion.

The often bizarre symptoms, or their overtly irrational character, may elicit in "helping adults" adverse reaction to the sick children with damaging results.

Jarvis[1] points out that these children provoke a hostile countertransference in others as well, such as school personnel and therapists. Therefore, it is recommended that they be referred to qualified specialists who would not be subject to these human but undesirable reactions.

These children are *not* behavior problems at school; they are not reprimanded for fighting, or for disobedience. No disciplinary measures are needed. The only behavior problem is their not wanting to go to school. They are usually of at least average intelligence, but often scholastically underachievers and daydreamers from way back.

If he carefully surveys the record, the doctor will find signs of poorer attendance than among other children preceding the full blown-up episode. The school-phobic children tend to be on the shy side, easily intimidated, very dependent, with strong attachment to home and mother, highly sensitive, easily irritable with shifting emotional responses.

[1] Jarvis, Vivian: The Psychoanalytic Quarterly, 33:441 (July, 1964).

Often, the mothers of those children may be anxious and ambivalent about separation from the child. A maternal grandmother may be very much in the picture. Oversolicitude, overprotectiveness may be apparent in the mother who is involved in this symbiotic relationship with her child. The child becomes a mirror of the mother's lack of emotional fulfillment in her marital relationships. Often it is a loss of a love object for the mother that may increase her own need for the child and her own need for him to stay home with her. This need is communicated on an unconscious level, of course, since outwardly the mother is always concerned about the child's non-attendance. In my own experience, in each case of school phobia there had been a death in the family. In one case, four persons died in a year and a half: two maternal brothers, father, and paternal grandmother.

The child himself is usually only dimly aware of the problems in the family. He is usually a sensitive child, preoccupied with himself and his own feelings. Often, indeed, he hardly has any other interests. He is socially isolated. He has a tendency to voice many physical complaints. The attending physician may be given a series of symptoms such as:

1. Gastrointestinal disorders, like stomach pains, loss of appetite, nausea, gagging, regurgitation, diarrhea and constipation.

2. Headaches

3. General "fatigue."

4. Muscular tenderness

5. Upper respiratory infections of low grade but long duration — sort of "interminable."

6. Low grade "virus" or unspecified infection. The child may remain at home for several days and upon return to school, experience recurrences of the symptoms without demonstrable cause.

The mother's apprehension, the family dynamics, and the personality of the child lead the physician to suspect emotional factors, once he has eliminated organic causes. Reliance upon the judgement of the physician is needed to quiet the parent's growing anxieties. It is also the family doctor who should advise psychiatric evaluation. A psychiatric diagnosis must be made. Differentiating a psychosis from a school phobia is essential — but may not be easy. A psychotic child is generally withdrawn from *all* activities. Avoidance of school as a part of life is part of a regressive pattern. The child with beginning school phobia should be returned to school as quickly as possible to avoid further isolation from his peers and to avoid further entanglement in the family pathology. If the child cannot tolerate full day attendance, limited day scheduling or even home tutoring can be tried. Child guidance teams within the schools —such as psychologists, social workers, and psychiatrists—have become a fundamental part of therapeutic education planning. Cooperation between the referring physician, therapist, and the school child guidance staff lends supportive help to the alignment of goals for the child.

Many of these children experience problems of "body image" and will back out of gymnasium work, seeking release through medical exclusion. This may be particularly apparent during the pre-adolescent and adolescent stages. Physical maturity, concern over sexual and aggressive impulses may heighten fears and anxieties. A change of schools from primary to secondary, away from the familiar, protective school of early childhood can add to the conflicting forces of growth. The adolescent who has not resolved the early dependency ties cannot cope with the greater responsibilities now demanded of him. He sees himself as helpless, exposed to dangerous impulses that he cannot control with a resultant school phobia. Recourse to legal action and the school's use of the Juvenile Court to force attendance may precipitate deeper problems for the youngster and the parents.

The difficulty in the treatment of these children lies in the shifting varieties of neurotic defenses against the varying degrees of anxiety which they would otherwise feel. At one time, the child unconsciously distorts the facts of the real situation. At other times, he denies feelings, or places responsibility for feelings or reactions on imaginary or incorrectly perceived situations. There are individual, quantitative differences in intensity,

depth, and the meaning of the conflict. Their levels of anxiety will shift from mild to severe. They will avoid places or things which are associated in some distorted, direct, or indirect way with the source of anxiety. Physical symptoms without clinical evidence can be used to limit contacts with the "real" world which might cause panic or anxiety. A phobic reaction, if not treated, may spread to other areas of a child's life; or, if it disappears without treatment, may reappear later in the form of another symptom, often somatic. Both parents should be involved in therapy.

Summary

A school phobia is a neurotic disorder that finally affects the total personality. It is caused by personality conflicts of long standing, having their roots in early childhood and in the family situation. It is usually triggered by recent events. It has to be differentiated from other reasons for school avoidance. The demarcation line between school phobia and incipient psychosis is not always clear.

After school phobia is diagnosed the child should be directed for treatment without delay. It is necessary to return the child to school as soon as possible and to prevent spreading of the phobic pattern of reaction. Skillful psychiatric interpretation may ease the anxiety and return the child to school quite soon. After the return to school, the child is expected to remain in therapy until the original conflict can be aired and worked through. In most cases the parents also need to be involved in treatment.

455 Elizabeth Avenue

Blood Volume Changes In Recumbency

Five healthy adult males were studied during a 30-day bed rest experiment. Repeated tilt table tests, using an English saddle type of support, were conducted before and after the period of recumbency to determine the response of the subjects. Radioisotope blood volume determinations were made prior to the study, during the study, and during the recovery phase. These tests were performed in conjunction with a study designed primarily to evaluate the musculoskeletal changes that occur as a consequence of prolonged bed rest. The results indicate that definite cardiovascular deconditioning occurs after 30 days of bed rest and that almost complete recovery is achieved after two weeks of ambulatory activity. The study also demonstrates that blood volume decreases in the first few days of bed rest and returns toward normal at the end.

F. B. Vogt, P. B. Mack, and P. C. Johnson
Aerospace Med 37:771 (Aug) 1966

Alcoholism And Pedestrian Fatalities

Blood alcohol levels, liver condition, and prior arrests for public intoxication were compared for 208 driver and pedestrian fatalities in San Francisco. Thirty-seven percent of the fatalities within six hours after the accident had been drinking prior to death and 71% of these had levels of 150 mg/100 cc or higher. Among those aged 25 or older who died within six hours after the accident and who had no alcohol in their blood, 78% had no arrests or cirrhosis, 15% had cirrhosis only, 7% had arrests only, and none had both. Among those dying with 150 mg/100 cc blood alcohol or higher, 23% had no arrests or cirrhosis, 39% had cirrhosis only, 15% had arrests only, and 23% had both. The majority of drivers and pedestrians involved in traffic accidents after drinking do not appear to be social drinkers. Among young drivers social drinking appears to be more of a problem.

J. A. Waller and H. W. Turkel
New Eng J Med 275:532 (Sept 8) 1966

This is the sixth and final article of a series on workmen's compensation and industrial rehabilitation in our state.

Rehabilitation Of The Disabled Worker

Employment Problems of the Handicapped*

Jarvis Smith, M.D./Trenton

In modern society, income is dependent largely upon work. Each individual is expected to be a productive member who contributes to the flow of goods and services. For the past several years (prior to 1965), the country was confronted with an unemployment rate which had hovered around the 5 per cent figure. Even today with our economy at record levels, unemployment remains a problem within particular groups.

Attacks on the problem of unemployment have included programs for the so-called "unemployables." These may be persons who are functionally illiterate, or who do not have the basic social skills necessary to survive in a world of work. This problem may increase as skills change with changing industrial requirements. The Federal Government is concerned about maintaining a healthy economy and has started training programs under the Manpower Development and Training Act and the Economic Opportunities Act.

The first concern of the Institute's panel was with workers who are handicapped by reason of industrial injury and who have undergone a program of rehabilitation but find closed doors when they seek employment. They are only once removed from the worker whose handicap may be due to inadequate education, or to the emotional shock that comes from being without a job for several years. It would be ironic, however, if social legislation designed to aid the injured worker was used as an excuse for denying him employment: an excuse based on the unfounded fear of increased workmen's compensation costs used as a reason for not hiring the handicapped worker.

National Attitude

"Hire the handicapped" is a popular slogan which has received the endorsement of associations of employers, trade unions, the medical profession, and others. The official policy of the National Association of Manufacturers states: "The American system of private competitive enterprise should provide every opportunity for the handicapped person who is willing and qualified to perform the job. Employers know from experience that the handicapped individual, when matched to the requirements of the job, is no longer handicapped."

The Chamber of Commerce of the United States has this to say: "The experience of employers with these (physically impaired) workers has demonstrated that their job-performance records compare favorably with those of the able-bodied, with respect to productive efficiency, accident rate, and absenteeism."

The AFL-CIO points out: "Handicapped workers when placed on the right job are capable workers. Studies have proven that they are productive and efficient."

*An abstract by Jarvis M. Smith, M.D.—Medical Director, New Jersey Rehabilitation Commission—from the original monograph by Monroe Berkowitz, Ph.D.

The excellent work being done nationally by the President's Committee on the Employment of the Handicapped is supplemented in New Jersey by the Governor's Committee on the Employment of the Handicapped. Employers, labor union representatives, as well as government personnel, have been active in spreading information about solving problems concerning the hiring of handicapped people.

W. Scott Allen summarized the leading studies of the employment of the handicapped, beginning with the Western Electric study in 1932 and citing the recent experience of the Liberty Mutual Rehabilitation Centers. From these studies, he finds that the presumed difficulties in the employment problem of the handicapped are more apparent than real. Yet major resistance is still encountered by rehabilitation service personnel, vocational counselors, and employment specialists in placing handicapped workers —in spite of all that has been done to spread the word through the President's Committee and the Governor's Committee; in spite of the concrete example of firms which have successfully employed the handicapped; and in spite of evidence in many studies. Allen concludes that among the nearly 160,000,000 manufacturing and non-manufacturing industries and businesses in the United States, only a handful of firms have successfully coped with the problem of hiring handicapped workers. One of the Institute's panels considered the employment problem of the handicapped. This had representatives from the Governor's Committee, from sheltered workshops, from the Rehabilitation Commission, from management, from unions, and from the legal and medical professions, as well as from the employment service. In part, the problems of employing the handicapped relate to the prejudice which employers may have because of the "crippled" appearance of many of the handicapped. They may feel that this will result in an emotional reaction by other employees. It was also pointed out that new advances in rehabilitation may pose further obstacles, especially for the rehabilitated cardiac patient who can function well with new developments, such as heart valve and pacemakers with their complicated but effective electrical wiring devices. All of these may add to his unusual appearance and serve to identify him as a handicapped person at the interview stage, where he may be rejected arbitrarily despite the fact that his condition with the new devices may be better than normal.

The panel felt that the situation must be faced for what it is. To the extent that misinformation still prevails and that prejudices still exist as to be capabilities and problems involved in hiring the handicapped, intensive educational efforts must be continued. Surveys and studies reveal that the handicapped workers are safe, productive, dependable, and loyal employees, and this view-point needs constant reiteration.

Purposes of the Second Injury Fund

Discussion of the problems of hiring the handicapped, especially the industrially disabled, leads inevitably to the second or subsequent injury fund law. This is known in New Jersey as the "Two Per Cent Fund." One of the original purposes of this law was to encourage the hiring of the handicapped worker. If a worker with a pre-existing impairment suffers a compensable injury, the combination of the prior condition and the second injury might result in disability greater than that which resulted from the subsequent injury alone. The classical example is the one-armed worker who loses the other arm in an industrial accident. The second injury alone, under most jurisdictions, would require a permanent partial award of a number of weeks. The loss of the two major limbs, however, would render the worker permanently and totally disabled. Under the "Two Per Cent Fund" in New Jersey, the employer would pay only the schedule award for the loss of the arm, and the balance of liability would be shifted to the Fund. Presumably, therefore, the law is designed to encourage employers to hire handicapped workers.

Before one becomes too optimistic, however,

it should be remembered that the subsequent injury fund in New Jersey is fairly limited. And a high proportion of the employers in this state are unfamiliar with the law and its purposes.

The New Jersey Governor's Committee to Employ the Handicapped has distributed a summary of the New Jersey Second Injury Fund. It points out that employers want to hire the handicapped, but they do not want to be penalized for doing so. It stresses the employer's awareness of the skills, dependability, loyalty, and safety records of the handicapped. But, it suggests that this may be overshadowed by the knowledge that if the handicapped worker is involved in a job accident, the effects may be more severe than if a non-handicapped worker has the same accident. The Second Injury Fund, provides benefits for a worker who is totally and permanently disabled as a result of an industrial injury, even if such a person had previously been permanently and partially disabled from some other cause, irrespective of whether the previous injury or condition was industrial or non-industrial in origin.

Limitations of the Fund

Several things should be noted about the Two Per Cent Fund law:

1. The law does not restrict coverage, insofar as the original injury is concerned, to the industrially disabled. It includes within its provisions, the handicapped worker, regardless of the origin of his impairment, be it congenital, industrial, or otherwise.

2. New Jersey's law is restrictive in the sense that the second injury fund comes into operation only if the combined results of the second industrial accident and the original impairment result in permanent and total disability.

3. Most important, and probably the least understood by rehabilitation people and others, is that no person is eligible to receive payments from the second injury fund if:

(a) The disability resulting from the injury caused by the compensable accident is in itself permanently and totally disabling.

(b) If permanent total disability results from aggravation, activation, or acceleration by the last compensable injury of the pre-existing disease or condition, the person is not eligible to receive payments from the second injury fund. Only if the subsequent injury is unrelated to the first can the employer be relieved of a portion of his liability. If the total disability is a result of an aggravation or activation of the previous condition, then the full liability is the present employer's under this "Two Per Cent" law.

(c) The person is not eligible to receive payments from the subsequent injury fund law if the disease or condition which existed prior to the compensable accident is in itself progressive, and, by reason of this progression, renders him totally disabled.

(d) Suppose a person is rendered permanently partly disabled by the last injury. Now, if he subsequently becomes permanently totally disabled by reason of physical deterioration or pre-existing condition or disease, the fund does not come into play. In effect, provisions contained in A, B, and C are designed to prevent payments from the fund if the permanent and total disability flows from either of the disabilities but not from their combined effects.

Financing the Fund

New Jersey's fund is financed by an assessment against the carrier and the self-insurer. Each is assessed two per cent of the compensation payments, excluding the cost of medical benefits, made during the calendar year preceding the date of collection. It is from this assessment that the New Jersey fund derives its name.

The original law did not provide any maximum limit on the size of the fund, but today the maximum limit is $1,500,000. Collections cease whenever the amount of the fund, including accumulated interest, exceeds this sum. In recent years, only in 1956 have no collections been made because the fund balance was over the statutory amount.

Fund Hearing Procedure

1. Before any claimant can receive benefits from the fund, a hearing must be held and a determination made. In the typical case the employer is not involved in the hearing. The fund is represented by the Attorney General's Office, which acts for the Commissioner of Labor and Industry. The injured worker is also represented by counsel. A verified peti-

tion for benefits must be filed within two years after the last compensation payment has been made or the date of the last medical treatment, whichever is later. The hearing is held before a Judge of Compensation who files an advisory report with the Commissioner.

2. Under a rule promulgated by the Division of Workmen's Compensation, certain of these "Two Per Cent Fund" cases may be tried concurrently with a claim for workmen's compensation. At the conclusion of the hearing, the Judge of Compensation makes a determination as to the compensation claim petition and renders an advisory report as to the petitioner's eligibility for Fund benefits. This rule assures the injured worker the prompt and full statutory benefits to which he may be entitled.

The supervisor of the "Two Per Cent Fund" also personally interviews each of the petitioners to determine his employment status, physical condition, and sources of income.

The order approving or denying benefits can only come from the Commissioner of Labor and Industry. If the Commissioner approves the application, he directs the Treasurer of the State of New Jersey to make semi-monthly payments to the petitioner, subject to periodic reconsiderations and extensions as the case may require. Payments are made from the "Two Ped Cent Fund" account which consists of monies collected from workmen's compensation insurance carriers and employers, self-insured for employer's liability.

Improving the Fund

Proposals to improve the New Jersey law have been borrowed liberally from the experience in New York State. There, once it is established that the employer had knowledge of the pre-existing condition and that it was a hindrance to employment; and once it is shown that the combined injuries result in disabilities materially and substantially greater than would have occurred in the absence of the pre-existing condition, the fund becomes involved. The whole award runs initially against the individual employer, and payment for compensation begins and continues without interruption. However, if the liability extends beyond a 104-week period, the employer can petition the fund to assume some of the liability. This, in a sense, brings the real contenders together. The fund can be defended by a representative of the insurance or employer interests, or the very persons who contribute to the fund.

It also might be noted that at present there is some dissatisfaction with the New Jersey practice which limits an award to weekly compensation payments. Today, medical and hospitalization payments are increasing at such a rate that they may constitute the financially significant portion of the liability. There is nothing in the law at present which would remove this liability from the employer.

Those interested in employing the handicapped should have a direct interest in the subsequent injury fund. It should be the type of law which will do everything possible to encourage the employment of the handicapped.

Recommendations

1. There is a general lack of knowledge concerning the potential of the handicapped worker and the advantages which modern rehabilitation practices have brought about. There should be an intensive educational campaign directed toward government agencies, employees, employers, unions, and individual citizens. This campaign should be designed to make the employer aware of the advantages of employing the handicapped and of the valuable skills available.

2. It is vitally necessary that the State Vocational Rehabilitation Commission be adequately staffed with personnel whose compensation is comparable to the employment opportunities available in neighboring states. To this end, all suitable efforts should be made toward influencing the legislature of

New Jersey to appropriate sufficient funds to take advantage of federal matching funds available for services provided by the State Rehabilitation Commission.

3. The subsequent injury fund law has a limited but indispensable role to play in encouraging the employment of the handicapped. It is essential that a continuing campaign be conducted to familiarize employers with the provisions of the subsequent injury fund law, what it is designed to accomplish, and what it cannot accomplish.

4. New Jersey's subsequent injury fund law is unduly restrictive. It should be amended to cover not only those who are totally and permanently disabled as a result of the combined injuries, but also to cover anyone whose disability from the combined injury is materially and substantially greater than it would be from the second injury alone.

5. Employers should be encouraged to utilize the services of the Employment Service in placing the handicapped. Selective placement is crucial in securing maximum performance.

6. The Governor's Committee for the Employment of the Handicapped should be encouraged to continue its good educational work. This Committee might well accelerate its educational efforts toward the industrial physicians and personnel people.

7. The Institute's panel was reluctant to recommend any proposals designed to penalize employers who refuse to rehire workers who are injured in their employ. However, the panel did agree that all voluntary methods should be used to encourage the re-employment of such workers.

8. The future dimensions of the changes which will be brought by automation and other changes now taking place cannot clearly be foreseen. Since the industrial revolution, machines have been substituting for the muscle power of workers. Now automation promises to remove many routine movements from the worker to the machine. The functions which are left may well be adapted to the workers who are physically handicapped.

If this article, or any of the series, has stimulated questions, they should be sent to Jarvis M. Smith, M.D., Medical Director, New Jersey Rehabilitation Commission, John Fitch Plaza, Trenton, New Jersey 08625. Dr. Smith will answer such questions in THE JOURNAL.

John Fitch Plaza

Measles Can Be Eradicated

No longer is it necessary for a child to have measles. All that is needed is immunization against a disease that once was taken for granted as one of the hazards of growing up. Measles could be eradicated in the United States in a short time if all young children were immunized. Already more than 12 million American children have been immunized against measles since a vaccine was licensed in 1963, and the disease has dropped to a fraction of its once high incidence.

Measles is sometimes a more serious disease than many parents realize. True, most children recover from measles in a short time and with no ill effects. However, in recent years deaths attributed to measles have averaged more than 400 per year, and other nonfatal effects have caused serious health problems for many more children. Though deaths and serious after-effects are not common among children who get measles, it isn't wise to take a chance. And it isn't necessary to take a chance.

The American Academy of Pediatrics recommends that the measles vaccine be given at the age of about 12 months.

Good communication between pathologist and surgeon leads to better patient care, as Dr. Tullis here points out.

The Surgical Pathologist*†

John L. Tullis, M.D./Summit

Surgical pathology is that branch of laboratory medicine concerned with the diagnosis of histologic and cytologic tissue alterations brought about by disease and with the evaluation of the disease state in terms of growth pattern, growth potential, and prognosis. Most of the 6,000 pathologists in the United States devote their efforts to clinical as well as anatomical pathology; but in larger hospitals (and in most teaching institutions) the pathologist is usually a specialist in a particular branch of laboratory medicine. As the work load of the laboratories increases and as the scope and complexity of laboratory procedures broaden, the trend to specialization in a particular branch of laboratory medicine will probably gain momentum.

Virchow introduced methods which have continued to grow and expand to the point where today the competent pathologist can establish a correct diagnosis in well over 95 per cent of the surgically removed tissues that come to him. Several factors make this high degree of diagnostic accuracy possible.

The competence and experience of the pathologist are obvious factors in achieving accuracy of diagnosis in surgical pathology. Most pathologists today are well trained by the time they present themselves to the American Board of Pathology. The Board certifies only those who satisfy rigid requirements and demonstrate their ability in a comprehensive examination. Experience, continuing training and study, and participation in professional workshops and seminars are among the means by which pathologists constantly try to improve their understanding of medicine. Nevertheless, there are certain cases about which acknowledged experts differ. Because our knowledge of some disease states is so limited, it is sometimes impossible to get agreement on the interpretation of occasional obscure lesions. Pathologic diagnosis in these cases becomes a matter of opinion. Fortunately, the number of cases in this category is not great; but they emphasize the fact that pathology is not truly an exact science. Some lesions are in the grey zone and never resolve into white or black. Other lesions get properly sorted out after they have been observed over a period of time and can be evaluated in perspective. For instance, two lesions which were formerly considered to be malignant but which are now known to be benign are keratoacanthoma and pseudosarcomatous nodular fasciitis. Only after long clinical observation of treated and untreated cases, and after meticulous clinico-pathologic correlation, was it possible to arrive at the conclusion that these two lesions are indeed benign.

One source of error in tissue diagnosis is related to the lack of clinical information. The age of the patient, the duration, distribution and character of the disease process, the symptoms, the hormonal background, and the therapeutic overlay constitute a minimum of information that should be given to the pathologist when he is asked to make a diagnosis on surgical specimens. This information must sometimes be supplemented and correlated with x-ray interpretations and clinical labora-

* One of a series of articles especially prepared for this JOURNAL by members of the New Jersey Society of Pathologists.

† The scope of this paper is not meant to include a review of the traditional role of the pathologist in the field of autopsy medicine. The omission should not be interpreted as de-emphasis of this important source of teaching and learning medicine.

tory determinations. Intelligent discretion in sorting out pertinent information will save everyone's time. Not much clinical information is required for specimens such as appendices, gall bladders, pilonidal cysts, or hemorrhoids; but the full treatment *is* required for specimens such as skin lesions, female genital organs (particularly endometrium), tumors of endocrine origin, and bone lesions. There is no easy way to get this information. The hard sell, the soft sell, formation of rules, oral and written appeals seem to work for a while, but seldom produce sustained results. In Overlook Hospital, the operating room supervisors and nursing staff have been most cooperative, and we are indebted to them for their sustained efforts in asking the surgeon for what is known locally as the "Dear John letter." The pertinent information is dictated at the operating table by the surgeon to the nurse who writes it on the pathology request form. Getting information about specimens removed outside the hospital is usually more difficult. Where the information is not voluntarily supplied by the surgeon, he must be interviewed in person or called on the telephone. This may be time-consuming, but where necessary to achieve accuracy in diagnosis it is time well spent.

Another major factor in achieving accuracy in tissue diagnosis is the character of the tissue sample submitted for diagnosis. The biopsy must contain the lesion or a part of it. The best biopsy is usually one which contains the growing margin of the tumor together with adjacent normal tissue. A biopsy taken from the center of a tumor may show only necrotic tissue. One taken outside the margin may show only normal tissue. In any case, it should be clearly understood by the surgeon and the pathologist that *a negative biopsy proves nothing*. A positive biopsy is of great importance in evaluating a patient. A negative biopsy should not influence the clinician one way or the other. If the clinical evaluation warrants it (and if it is surgically feasible), an attempt should be made to disprove the negative biopsy by getting a second biopsy. Of course, it is understood that both the surgeon and the pathologist must handle the tissue with care so that delicate tissues are not destroyed, distorted, or otherwise harmed.

One additional element in the successful culmination of an accurate tissue diagnosis is the pathologist's ability effectively to communicate his interpretation to the clinician. There must be reciprocal acceptance and understanding of the terminology which should be chosen to indicate the origin, growth pattern, degree of malignancy, lateral and deep extent of invasion, and other special evaluating features of the lesion. For example, "Poorly differentiated, mucin-producing adenocarcinoma of rectum with blood vessel invasion, extension through the full thickness of bowel wall, and metastases to two out of seven mesocolic lymph nodes" is a diagnosis which clearly defines the local pathology. With this and appropriate clinical information, the surgeon can intelligently plan the management of the patient and formulate a reasonably accurate prognosis.

It is better to be redundant than to be misunderstood. Thus, such terms as "malignant lymphoma," "malignant melanoma," "benign basal cell papilloma," "benign endometrial hyperplasia," "no evidence of malignancy," or "consistent with, but not diagnostic of" are frequently used to clarify diagnoses. It may be necessary (usually in borderline or doubtful cases) to add an explanatory note to the diagnosis. This lets the surgeon know why the pathologist feels as he does about the case. The note may indicate some reservations or lack of confirming evidence or may suggest the presence of an evolving lesion which may in time prove to be different from the lesion at present.

The surgeon is entitled to know when the pathologist is in doubt. Doubts are usually resolved when further studies are made, additional blocks are cut, or special stains or histochemical reactions are employed. As more patho-physiologic phenomena are understood and are made manifest to the pathologist by the use of histochemical procedures, enzyme studies, karyosome typing, tissue culturing, and electron microscopy, many of the obscure

and very early tissue changes will become evident and diagnosable.

The use of the cryostat has made more extensive histochemical investigations possible. More important, it has greatly increased the accuracy of frozen section diagnosis. A properly done cryostat section closely approximates a permanent section in terms of cellular detail and clarity of definition. The major source of error in frozen section diagnoses stems from choosing the wrong blocks of tissue for sectioning. The specimen must be examined as it comes from the operating room and then that block which appears to most likely represent the pathology must be selected with care. Usually one (and no more than two) blocks of tissue from one specimen are chosen for freezing and immediate examination. As many as six blocks may be selected for processing for permanent sections in the same case. Errors of omission may occur as a result of the limited amount of tissue studied. It is embarrassing to the pathologist to miss on frozen sections what later turns up in the permanent sections. However, this does occasionally occur and the surgeon should be aware of the possibility. Fortunately, a preliminary diagnosis that is wrong because of omission can be corrected by a subsequent operation where necessary. The surgeon should prepare his patients for that eventuality when their frozen section diagnoses are reported negative.

Of much more serious import is the false positive frozen section, particularly if unnecessary radical surgery is carried out as a result of it. The pathologist is constantly aware of the possibility of making a false positive diagnosis, and as a result tends to be conservative in his frozen tissue diagnoses. However, it is much better to be conservative and to withhold diagnosis until permanent sections are reviewed if there is any question in the pathologist's mind about the diagnosis. The enlightened surgeon understands the limitations of the system and is usually willing to go along with, albeit sometimes unhappily, the pathologist's decision to defer.

If the report, particularly one indicating malignancy, does not jibe with the surgeon's clinical evaluation, the surgeon should defer action until he can be convinced of the correctness of the diagnosis. This approach by both surgeon and pathologist is for the benefit of the patient.

In this resume of some of the tribulations that confront the surgical pathologist, several points have been made which are here summarized for emphasis.

1. A competent pathologist can achieve a remarkably high degree of accuracy in tissue diagnosis, provided he is in possession of a good biopsy and pertinent clinical information about the case. Lacking either one of these his diagnosis may fall wide of the truth.

2. Communication between pathologist and surgeon must provide complete and clear understanding of the information being communicated.

3. Positive frozen section diagnoses approach the reliability of permanent section diagnoses, but negative frozen section diagnoses are sometimes proved to be wrong when considerably more tissue becomes available for microscopic review in the permanent sections. Clinicians and patients should understand that a negative frozen section diagnosis requires the confirmation of permanent section diagnosis.

4. The surgical pathologist is a member of a medical team and, as is usual in team action, the success of any one member of the team depends in large part on a cooperative team effort.

Overlook Hospital

For paroxsymal hypertension, suggests Dr. Richter, try nitroglycerine under the tongue. Unlike parenteral medication, it can always be retrieved.

Paroxysmal Hypertension

Using an Old Agent in a New Role

Emanuel J. Richter, M.D./Rockaway

Most of us think of paroxysmal hypertension in terms of a pleochromocytoma or paraganglioma.[1] Such patients have attacks lasting from seconds to hours with palpitation, precordial distress, tachycardia, headache, anxiety, nausea, and occasional vomiting. These attacks are sudden and the elevation in blood pressure is abrupt. This rise may reach alarming levels in both the systolic and diastolic phases.

White[2] has described "vasomotor storms" which he ascribes to arteriolar constriction in the course of chronic hypertension with serious results such as apoplexy. These storms have not been mentioned in normotensive patients. The Regitine (phentolamine) test and perirenal insufflation tests have been used to demonstrate the pleochromocytoma. The intravenous use of histamine has also been well described. Such tests are of value in orderly management, either in the office or hospital. However, they are of no value to the physician who is hastily summoned and confronted with an extremely apprehensive patient who has an over-whelming elevation of blood pressure.

The patient with paroxysmal hypertension has a normal basal level of his blood pressure in both the systolic and diastolic phases. Yet a severe elevation occurs at unpredictable times. The emotional element does not seem to be the responsible factor in many of these cases such as the one below described. Indeed, the patient can be normotensive even when confronted by a disturbing mental situation.

The author followed a female patient over a span of 35 years, since she was 45 years of age. She is normal in all respects and the usual clinical investigations including urine, electrocardiograms, chest x-rays, and so on were all well within normal limits on repeated determinations over the years. Bi-weekly determinations of blood pressure were done in both arms and in the sitting and supine positions. These determinations have invariably been normal. Systolic pressure has ranged from 120 to 140, the diastolic from 60 to 80. During the twenty alarming episodes of paroxysmal hypertension, the blood pressure averaged 270 systolic and 145 to 160 diastolic. This patient does not routinely use any antihypertensive or sedative agents.

It was felt as she grew older that some method must be found quickly to control the abrupt bouts of paroxysmal hypertension. The advancing brittleness of the arteries is of particular importance in the cerebral and coronary beds. The use of reserpine agents was considered, but abandoned as being too slow in its action. The faster acting nitrites seemed to be better.

Ordinary tablets of nitroglycerin in the strength of 1/150 grains were selected. After sublingual administration, the blood pressure cuff was allowed to remain in place on the arm to check the response every two minutes. The blood pressure promptly came down to normal with the use of only one or two tablets. This drop occurred in from 30 to 60 minutes. As the blood pressure showed improvement, the remains of the tablet were then either expectorated or swallowed. After either procedure, the patient rinsed her mouth. In either case, the effect of the agent was rapidly terminated since it is absorbed largely *via* the sublingual route. Nitroglycerin is not absorbed to any appreciable degree from the gastric mucosa. In this way, the hypotensive action of the nitroglycerine is terminated and thus is directly under the physician's control. In every instance nitroglycerin thus used gave a satisfactory and predictable response.

The hypotensive action must be terminated as soon as the desired fall in blood pressure takes place. At the same time, the systemic pressure must not be allowed to drop too far,

as this might induce coronary ischemia or occlusion. This calls for a nice sense of judgment on the part of the physician. To avoid the possibility of an ischemia or occlusion, the blood pressure must be checked every two or three minutes, with the sphygmomanometer *in situ*.

Reliability

The sublingual administration of nitroglycerine offers a rapid practical method of swift treatment in an emergency situation. It is always under the complete control of the physician since he can terminate the hypotensive response promptly on very short notice. This gives a distinct advantage over hypodermic medications. Once an agent is given hypodermically, it is beyond the physician's control and passes to the systemic circulation for better or worse.

In personal communication with one of the attending physicians at Bronx Hospital (New York City), the writer learned of a hypertensive patient, similar to the one described above, who could well have benefied by this method. This was a 60 year old man who had been thoroughly documented as normotensive. He was seen by his doctor one night because he suddenly felt "very sick." At that point, he had a blood pressure of 270/120. For many years, the pressure had been 140/80. In this case, the physician, at the beside, used reserpine intra-muscularly. Blood pressure then dropped to normal levels by the following day. For many hours, this patient had to be subjected to a critical level of hypertension. During all that time he was in danger of a "blow-out" in the cerebral vessels. It was fortunate that, with the reserpine, he did not have a drop in pressure sufficient to cause coronary ichemia. There must certainly be many other cases of similar pattern which could derive benefit by nitroglycerine.

The female patient who is the basis of this paper does not seem to fall into any category of hypertension previously described. Montgomery[4] has described "basiliar artery hypertensive syndrome." His patients, however, had neurologic signs such as dysarthria, dysphagia, deviation of the eyes, and alternating transitory paralysis. Montgomery[3] does indicate that the hypertensive crisis may precede the neurologic signs but the latter will develop with the passage of time and with further episodes of paroxysmal hypertension. He suggests[3] that local interference with the arterial blood supply to the medulla may be the basis of the hypertensive response. Such theory has its basis in the experimental work by Rosenfeld[4] on the rabbit. Montgomery's tabulation[3] presents two groups. In the group *without* organic interim findings he considers: chromaffinoma, functional neurogenic hypertension with symptoms of autonomic imbalance such as marked sweating, palpitation, and flushing of the skin, cases of familial autonomic dysfunction (noted in children), arterial insufficiency in the basilar and vertebral arteries, and finally in hypoglycemia. Among patients with organic findings, he lists tabes, paraplegia, and brain tumor.

The subject of this report does not seem to come under any of the headings of Montgomery's classification. The etiology of this type of paroxysmal hypertension is simply not known.

Emotional factors were not considered significant in this patient. Her blood pressure was normal when she had severe emotional upsets. The severe bouts of hypertension came suddenly at times when the patient seemed to be entirely well and emotionally calm.

Mayer[6] believes that severe blood pressure elevation causes vascular damage regardless of etiology and that this can result in damage to the cerebrovascular bed. Rapid effective return to a normotensive level can prevent such damage.

Griffith[7] points to the danger to the renal bed in hypertensive crisis in normotensives. Shirger and Spittell[8] refer to the immediate treatment of hypertensive emergencies in the course of acute glomerular nephritis and toxemia of pregnancy and they advise hydralazine. Quarternary ganglionic blocking

agents such as hexamethonium and secondary amines such as mecomylamime require hospitalization and careful titration and may lead to hazardous side effects.

Friedberg[9] refers to nitroglycerine in angina pectoris but makes no mention of this agent in hypertensive crisis occurring in a normotensive patient. Indeed he classes nitrites (including nitroglycerine) as "agents of insignificant merit."

After this first case, described above, I had the opportunity of coping with paroxysmal hypertension in eight additional patients, three of them females. They ranged in age from 53 to 60. Their blood pressures during the paroxysms were between 240 and 260 systolic and 120 and 160 diastolic. In every instance, I tried the sublingual nitroglycerin and the results were prompt, controllable, and devoid of side effects. In four of these cases, I used the 1/100 grain tablet. The other four took the 1/150 grain tablet. Here, too, the practitioner's judgement is paramount.

Conclusion

Nitrogylcerine sublingually is a safe and effective treatment for paroxysmal hypertension. If it works too well, the patient can, on the doctor's instructions, simply spit out the unabsorbed excess lying under his tongue. This kind of control is absent when a medication is injected.

Bibliography

1. Reich, Nathaniel E.: *Encyclopedia of the Cardiovascular System,* 4:15 (September 16, 1959)

2. White, Paul O.: *Heart Disease,* Ed. 3, New York, 1947, Macmillan. Page 471

3. Montgomery, B. M. *et al*: Archives of Internal Medicine, 108:116 (October 1961)

4. Rosenfeld, S. *et al*: American Journal of Physiology, 169:733 (July 1952)

5. Montgomery, B. M.: Citation 4 above, page 116

6. Symposium on Hypertension, American Journal of Cardiology, 9:6 (June 1962)

7. Griffith, Andrew: Postgraduate Medicine, 30:118 (January 1961)

8. Shirgell, A. and Spittell, B.: Treatment of the Hypertensive Emergency. Proceedings of the Mayo Clinic, June 1961

9. Friedberg, Charles: *Diseases of the Heart.* Philadelphia, 1952, Saunders. Page 861

221 White Meadow Road

Medicare Rush Not Overwhelming

Community hospitals in August 1966 experienced the highest number of admissions for any one month since 1962 but Medicare was not a major factor, according to HOSPITALS, the Journal of the American Hospital Association. This study comes from a sample of 628 hospitals selected from a universe of 5736 short-term general and special (community) hospitals. Only 18 per cent of the admissions were patients 65 years of age or older (Medicare patients), but this group accounted for 29 per cent of the total patient days in August 1966. The average length of stay for Medicare patients was 12 days while "under 65" patients averaged only 6½ days. In July 1966, the first month of Medicare, the "over 65" group accounted for 19 per cent of hospital admissions and 28 per cent of the patient days. While the community hospitals admitted 98,137 more patients in August 1966 than in July, only 12,225 of these admissions were Medicare age patients. Hospital occupancy generally drops in July and starts increasing in August. The survey finds that this situation occurred in August, the second month of Medicare, with an average occupancy of 77 per cent. In the first month of Medicare average occupancy was 75 per cent.

Dr. Karel has found that intradural methyl prednisolone was an effective treatment for sciatica, especially when the sciatica was part of a disc syndrome. It worked on him, and he commends it to others.

A New Treatment For Sciatica

Response Of A Physician As A Patient And Review Of The Literature

Jack R. Karel, M.D./Hillside

This paper was prompted by my experience as a patient, being treated for sciatica with intradural injections of methyl prednisolone acetate.* I have also included a review of the scanty literature on this subject.

The ruptured intervertebral disc in the lumbar region is recognized as the most common cause of low back pain and sciatica.[1] This writer was one of those with the intractable pain that so often develops in these cases. Eleven years after the removal of a degenerated disc between L-4 and L-5, the back pain and sciatica recurred, necessitating bed rest and traction. After four weeks of traction and physiotherapy, relief was noted and limited activity resumed. Five months later there was recurrence of symptoms. Back to bed rest, but to no avail. A myelogram was done but no other disc lesion was found. To make matters worse, an arachnoiditis developed, but subsided in two weeks. The sciatica was as severe as ever.

The situation gradually became desperate. All conservative methods of therapy had failed. Getting out of bed in the morning and moving about became an ordeal. Trying to get to sleep at night was not much easier. To live on analgesics is a miserable way to carry on. Up to now, seven weeks in the hospital was to no avail except to find out that there was no other disc involvement.

* The brand of methyl prednisolone acetate used here is made by Upjohn, who have tradenamed it Depo-Medrol.®

At this stage, any patient is in a doubtful situation. What is left — fusion? Yet we know from highly qualified physicians of the questionable results of this treatment of sciatica.

Then I was accidentally alerted to a new approach: intradural injections of methyl prednisolone acetate.* I got in touch with the physician who had initiated the use of this new corticosteroid for the treatment of sciatica. After the first injection, about 85 per cent of the pain and tension disappeared in 24 hours. The back support was discarded 24 hours later. The intradural injection was made at the interspace above the site of the previous laminectomy so that the microcrystals of the corticosteroid would get into the adhesions and break them down. We also know that steroids are anti-inflammatory. After three weeks, a second injection was given. One striking result of this treatment is the dramatic improvement within hours after the injection. It also has been shown to be lasting.

The technic of epidural injections of analgesics or normal saline to relieve sciatic pain has been known since 1901 when it was described by Sicard[2] and Cathelin.[3] Because of the technical difficulties, it was discouraged and it remained for Pages[4] to introduce it into clinical surgery in 1921. Since then, other physicians have reported favorable results in the treatment of sciatic pain with epidural injections of anesthetics and saline solution.[5,6,7] The injection into the epidural space was *via* the sacral hiatus.

With the introduction (in 1953) of hydrocortisone over the same route by Lievre and his associates, [Cappio[8]] encouraging results have been reported. Over half of 239 patients with sciatic pain were similarly benefited, as re-

ported by Goebert and Gardner, *et al.*[9] Geraud[10] cited many favorable results. Twenty-one of thirty severely suffering patients treated by Solheim[11] reported that the drug had a true effect on pain within twelve hours after the injection. Six of them got almost complete relief. Most of the 21 patients had been previously bedridden with severe acute pain.

In 1959, methylprednisolone acetate* was marketed for the first time. It had been recommended for conditions other than sciatica. However, since epidural injections of hydrocortisone had resulted in beneficial effects in many individuals with this condition, Sehgal and Gardner[12] used this corticosteroid as an intradural injection in 36 patients.

The average duration of sciatica was three and one-half years and all required analgesics for pain. Twenty-nine patients had one or more myelograms prior to treatment (and in five, a second myelogram) followed by an increase of pain. Twenty-eight had undergone one or more laminectomies. Twenty-five had received extradural injections of hydrocortisone in procaine. Two had received corticotropin (ACTH) intravenously, and five received corticosteroids orally and with little or no effect. A follow-up of from two to twelve months disclosed complete relief in 14 patients and at least 50 per cent relief in twelve. These 26 patients were able to resume their daily work without need for analgesics. Intradural adhesions may result from nerve root compression, from trauma [surgical and otherwise], and from myelography, particularly when blood is present in the subarachnoid space. Corticosteroids, by their anti-inflammatory and anti-allergenic action, reduce congestion and inflammation. The effect of corticosteroids on mesodermal elements (arachnoid) is a direct one, and local application is more effective than is the systemic. The results of the above treatment justified the use of this therapy in selected cases.

When extradural treatment fails or where the causative lesion is known or presumed to be in the subarachnoid space, Seghal and Gardner[12] have injected corticosteroids intradurally by lumbar puncture.

Sehgal, Gardner and Dohn[13] in 1962 demonstrated the effectiveness of intradural corticosteroid injections in 100 patients (24 to 74 years of age) on whom a total of 143 myelograms and 143 laminectomies had been done. Caudal epidural injections of procaine hydrochloride and hydrocortisone acetate had provided temporary or no relief.

Mack[14] produced good results with intrathecal administration in 70 per cent of 48 patients with low back pain and findings suggestive of root compression syndrome. Breneman reported his experience with this new corticosteroid in 240 patients with the disc syndrome. One to twelve injections were given, and 226 obtained prompt and lasting relief.

It is most surprising that the medical profession has not been adequately alerted to this new procedure for the treatment of intractable sciatica. It is certainly more rational and more effective than those previously in use. Following my own treatment, I questioned many physicians who had never heard of the technic. The simplicity of the procedure, either in an office or hospital, is self-evident. Its safety has been amply demonstrated.[16] It has been shown without question that many people suffering with intolerable or intractable pain of sciatica caused by the ruptured intervertebral disc can be relieved. Why, then, has it been withheld? It is now quite obvious that the number of laminectomies and spinal fusions could be materially lessened by its use.

ADDENDUM: After my initial treatment, and control of most of the symptoms, I did what I would advise my patients *not* to do. I took a long motor trip. There was a swift recurrence of the more severe symptoms of sciatica.

Then, four intradural injections of methyl prednisolone acetate were received at intervals of three weeks, followed by two daily successive injections of hydrocortisone sodium succinate (Solu-Cortef-Upjohn) into the epidural space. To maintain freedom from the symptoms of sciatica, a Knight-Taylor Brace was worn. This also stabilized the spine from the trauma it had received.

Note that, with the exception of one day stay in the hospital for some of the injections and two days for the epidural injections, there was no loss of time from the daily work. Remember that in the treatment of patients with sciatica, there are conservative measures to be taken, other than long bed rest in hospitals in traction with much loss of income and great hospital expense.

Having been the patient, I am convinced of the safety of this treatment when it is given by competent and qualified personnel.

I here express my deep appreciation to W. James Gardner, M.D., a neurosurgeon in Cleveland, Ohio; to Irwin Moss, M.D., an anesthesiologist at the Alexian Brothers Hospital in Elizabeth, New Jersey; and to Ralph E. Sweeney, M.D., an orthopedic surgeon in Elizabeth, New Jersey.

Bibliography

1. Campbell's Operative Orthopedics, 4th Ed.: 894 (1963)

2. Sicard, A.: C. R. Soc. Biol., 53:396 (1901)

3. Cathelin, M. F.: C. R. Soc. Biol., 53:452 (1901)

4. Pages, F.: Rev. Sanid. Milit., 2:351 (1921)

5. Evans, W.: Lancet, 2:1225 (1930)

6. Kelman, H.: Amer. Journal of Surg., 64:183 (1944)

7. Robin, G. and Davidson, J. T.: *Harefuah,* 62:200 (1962)

8. Cappio, M.: Reumatismo, 9:60 (1957)

9. Goebert, H. W. Jr., *et al:* Cleveland Clinic Quarterly, 27:191 (1960)

10. Geraud, J.: *Therapie,* 19:671 (1964)

11. Solheim, Svein B.: Tidskrift for Den Norske Laegforening 16:758 (1960)

12. Sehgal, A. H. and Gardner, W. J.: Cleveland Clinic Quarterly, 27:198 (1960)

13. Sehgal, A. H., Gardner, W. J., and Dohn, D. F.: Cleveland Clinic Quarterly, 29:177 (1962)

14. Mack, E. W.: Rocky Mountain Medical Journal, 61:33 (1964)

15. Breneman, J. C.: Arizona Med. 21:635 (1964)

16. Sehgal, A. H., *et al:* Archives of Neurology, 9:64 (1963).

115 North Avenue

New Developments In Artificial Hearts

The National Institutes of Health is concentrating its efforts in the artificial heart field to support programs for development of auxiliary heart-pumping devices instead of a complete artificial heart.

The auxiliary device approach includes the programs led by Dr. Michael E. DeBakey of Baylor University and Dr. Adrian Kantrowitz, chief of surgical services at Brooklyn's Maimonides Hospital. Other teams working on developing complete artificial hearts will continue their research, but the government will not emphasize their approach. The decision to forego, for the present, a major program to build a complete artificial heart was made by Dr. James A. Shannon, National Institutes of Health Director, after he determined that not enough fundamental information existed on just how the heart operates to make such a project feasible.

Dr. Kantrowitz has explained that: "The heart is not a simple pumping device. It receives thousands of signals from other parts of the body. For example, when a good-looking woman walks down the street, your heart speeds up. To make mechanical hearts respond to a blonde will not be so easy. It's better to leave the heart in place to respond to all these signals and make a mechanical pump as an auxiliary device to do most of the work."

Dr. DeBakey is working toward a device that would allow the heart to rest long enough for it to recover its strength and resume its role in the body without assistance. Dr. Kantrowitz is aiming at the development of an implantable auxiliary device that would permanently aid those whose hearts cannot function adequately alone. Both these approaches, and others similar to them, are of the type the institute wants to support.

A National Institutes of Health spokesman said, "We want to develop a family of highly efficient short-term devices to tide people over acute heart attacks, and also a completely implantable heart-assist device. Then, after this type of development is worked out and devices have been proven in clinical trials with a high degree of reliability, and it looks like total heart replacement is feasible, we will push toward that goal."

Dr. Kantrowitz has praised the partnership between physicians and engineers as necessary in the artificial heart field. He emphasized that leadership in this research must remain with the medical profession and cannot be given to engineers who do not fully understand the medical problems involved.

115 North Avenue

Though still one of the most intractable disorders in medicine, drug addiction seems to be closer to a rational treatment plan than ever before.

New Approaches to the Treatment of Drug Addiction*

Granville L. Jones, M.D./Summit

Before one can develop a method of treatment it is necessary to decide what is to be treated and what is the objective of treatment. Much of the confusion and uncertainty about the treatment of drug addictions is caused by failure to answer these two questions. There is no unanimity of opinion as to the *objective* of treatment, and not much consensus on what is to be treated. Are we merely treating the person for the use of a drug, treating the person for the results of the use of the drug, or treating him for the basic condition which led to the use of the drug in the beginning? Is it our purpose to achieve total and permanent abstinence? May we constructively substitute another substance for the drug of habit? Can we usefully develop a maintenance program? We also need to decide how *immediate* our results must be and how *absolute* they must be. As O'Donnell[1] has formulated it: can we not consider it progress if the pattern of drug use shows increasing periods of abstinence? By this criterion we may see measurable progress. If we insist on immediate and permanent abstinence our record is discouraging.

We need to reformulate our thinking. A number of students of this subject have attempted to do this — among them Freedman, Brotman and Meyer[2] as well as Chein[3] and his associates. They ask: To what do we really object on the part of the addict? Do we simply oppose his use of a drug? If so, on what grounds? If the mere taking of drugs is objectionable should we not object to the diabetic taking his insulin, the cardiac patient his digitalis, the arthritic patient his cortisone or aspirin? Perhaps, it is not the use of the drug to which we object, but the fact that the user engages in anti-social actions and is a parasitic member of society. If we could institute some regime which would bring about social serenity and a productive life, do we really care what the subject swallows or injects? We should compare our attitudes toward the drug user and toward the drinker of alcohol. Most of us do not object to someone using alcohol as long as he is able to relate in a constructive manner with society.

In the past most people have assumed the orthodox attitude that the immediate objective is to bring about cessation of drug use. If we are satisfied to do this on a temporary basis only, it is no great problem. We can withdraw the patient from the use of drugs in a variety of ways ranging from abrupt "cold turkey" method to a slow reduction technic. Today, with the highly adulterated drugs available in the city slums, the "cold turkey" method causes little real suffering and is preferred by some clinicians. However, most of us feel that there is nothing to be gained by allowing the patient to suffer *any* pain or discomfort, so we carry out a substitution and rapid reduction regime. For the heroin or morphine addict we substitute

* Read at the Knowles Institute for Ministers, Rutgers University, New Brunswick, New Jersey. At that time Dr. Jones was the coordinator of our state's drug addiction program. He is now with the Fair Oaks Hospital in Summit.

methadone (a synthetic narcotic), which can be given by mouth. After stabilizing the subject on this drug and adjusting it to the level which barely covers up the withdrawal symptoms, we reduce it by about one-fifth of the dose each day. This brings a person off of heroin in six or seven days with no discomfort. For patients who are using the barbiturates or other "sleeping pills" it is a little less rapid. We substitute pentobarbital elixir, and reduce the dose about 10 per cent a day taking up to, perhaps, two weeks to avoid a withdrawal delirium, convulsive seizures, and other major and dangerous complications.

There is no real problem in withdrawal. Any good intern can learn it in a short time. But if we stop at this point, the patient will, in practically every instance, return promptly to the drugs. Withdrawal alone is of limited value. The difference in the long range effectiveness of treatment programs depends on the psychological or psychiatric manipulation and follow up. There are a number of approaches intended to bring about personality restructuring. Some move immediately to bring the person into a group with desirable attitudes. Others proceed, in somewhat the way we do at the Institute,† to try to fragment the criminal society. The plans followed at Lexington and Fort Worth Hospitals, the Manhattan State Hospital, and the Metropolitan and Manhattan General Hospitals in New York are all based on "the group," but with individual variations. They are all psychiatrically oriented. The Synanon House in California, and (with some modification) Daytop Lodge on Staten Island have a somewhat difference approach. They deny that there is a basic personality problem or that the individual addict can be considered sick. They work on the assumption that addiction is stupidity not sickness, and try to reeducate the person along these lines. Their principal approach is a group process based on peer confrontation. In these sessions, the residents scrutinize and criticize themselves in a brutally frank and direct manner. They believe that only an addict can understand an addict, that psychiatric treatment is of no value, that there is no need to use drugs of any sort, and that the only thing that counts is to learn that one's past behavior has been harmful and self-destructive. They feel that it takes a long time to achieve a mature, constructive attitude. They think in terms of full residence for two years or more, followed by additional time in partial residence.

Dr. Efrén Ramirez (now in New York) developed a plan in Puerto Rico which begins with the voluntary reduction and possible complete withdrawal of drugs during attendance at community clinics, before the patient moves in for residential care. The residential period is divided into intensive psychiatric care, followed by a half-way house placement. A part of the treatment plan is assignment of advanced patients to assist in the care of the newer patients. The patients are expected to take the initiative in finding suitable work and readjusting to society. Some of the features of this plan are observed in many church programs and in half-way houses which have been established in various sections of the country.

Our psychiatric program at the Institute† is based on the theory that the patients are suffering from a form of delinquent behavior; delinquency which is characterized principally by failure or refusal to do things rather than by a drive to do something. The addict fails to assume the mature stature in society which is expected of an adult. He takes little or no responsibility for his own behavior. He blames others for his difficulties. He depends on others to make decisions for him, and to provide him with things, either willingly or through manipulation, exploitation, theft, assault, embezzlement, or forgery. Because of this attitude toward life, our patients drift into a delinquent subculture. In this subculture there is genuine "group feeling." Although the addict is typically a lonely, alienated member of the larger society, he can achieve status, identity, and significance by conforming to the norms and values of this delinquent society.

† The New Jersey Neuropsychiatric Institute at Princeton.

Our treatment begins with efforts to break down the patients' commitment to the subculture of delinquency. This is our first objective. Secondary (but important) is replacing the values and norms of the delinquent subculture with the values and norms of the orthodox society. We try to bring about a maturity of attitude, a willingness to assume responsibility for one's self and one's actions, and to accept the consequences of such actions. We do this by individual treatment sessions and by small group sessions, organized and carried out in the technic of transactional analysis. This procedure is well described by Dr. Eric Berne in his book *Games People Play*. We undertake to bring the patients to an awareness of the reasons and motives of their behavior and as rapidly as possible to develop habits of more rational conduct. In addition to these groups we have community meeting groups in which all of the patients sit together and discuss matters of common interest. Almost anything can be brought up at these sessions except the pleasures of using drugs.

Other modalities in our treatment program are occupation, music, recreation, industrial assignments, and classroom educational activities. Those patients who are school drop-outs are encouraged to take a refresher course and sit for the high school equivalency certificate examinations. Achieving these certificates accomplishes another step to possible rehabilitation.

After the patient has achieved some significant progress in the in-patient program, he may be permitted to leave and be followed up in the after-care part of our plan. This is based on regionally located, medically oriented after-care treatment centers operated by the counties with State subsidy. In these clinics, the patient is given individual counseling and is expected to meet with small groups in an effort to carry on the type of treatment initiated at the Institute. We try to build "group feeling" for the values and attitudes of the general society as opposed to the delinquent subculture. We also refer the patient to community agencies wherever it is indicated and call on the state rehabilitation agency for assistance in training and job finding.

Not all programs are based on immediate abstinence. An interesting research program is being carried out by Dole and Nyswander in New York City on the use of methadone maintenance. The assumption here is that because of compulsive drug seeking, drug using, and "hustling" behavior, an addict cannot relate well with psychiatric treatment or undertake a rehabilitation regime. If his drug needs can be satisfied on a continuing basis, then one can undertake a constructive rehabilitation plan. This is done with methadone maintenance. This permits a person to get along on one or at most two doses a day. Methadone sets up a blockade against the euphoria of heroin and permits the patient to engage in a normal educational, occupational program and to receive psychiatric counseling. The program, started at the Rockefeller Institute, is now being carried on at the Metropolitan Hospital in New York, Manhattan General (a division of Beth Israel Hospital), at the Albert Einstein Medical College in the Bronx, and at the Harlem Hospital. It is still in an investigational stage. Reporters have described varying degrees of success. It is too early to draw any conclusions but it appears to have validity in highly selected cases.

Another drug modality is the narcotic antagonist, cyclazocine. This drug also blockades the nervous system to the effects of heroin. Cyclazocine is not itself addictive. Only minor withdrawal symptoms occur when it is stopped and there is no great compulsive desire to continue the drug. The patient has to take cyclazocine daily. If he skips a dose then within 36 hours, he may experience the customary heroin euphoria. Cyclazocine has been used with some success at the Metropolitan Hospital in New York and at the Albert Einstein Medical College. This could carry patients through the precarious period of readaptation to the community after hospitalization. It not only has psychopharmacologic value, but it also serves as a deconditioner.

Through cyclazocine, one can extinguish the conditioned response aspect of the drug seeking and drug using ritual which, according to Wikler, has a very high degree of significance in the development of addiction. A "depot" form with prolonged effect would be even better than the oral form since cooperation could be assured.

Through all of these methods, one is faced with a major obstacle: the attitude of the addict himself. The addict is satisfied with his habit. He does not willingly seek treatment. He rarely asks for help until something is hurting him. This may be the sudden loss of a job, threatened arrest and imprisonment, the loss of a wife or husband, the breaking up of a home, or disgrace and humiliation by one's associates and colleagues. When the patient does ask for help we must offer him something which, to him, is as desirable as the medicine he has been taking. This is difficult. It is not sufficient to tell him he should give up his habit because it is wrong. The addict can rightly ask us on what basis we are making this value judgment, and we must give a convincing answer—one in which we believe—before we can persuade him to change.

Bibliography

1. O'Donnell, John, U.S. Public Health Service Hospital at Lexington, Kentucky: Personal Communication

2. Meyer, A. S., Freedman, A., and Brotman, R.: "A Model Continuum for the Prevention and Treatment for Narcotic Addicts": Am. J. Publ. Health, 54:5, May 1964

3. Chein, I., Gerard, D. L., Lee, R. S., and Rosenfeld E.: "The Road to H": Basic Books, New York 1964

19 Prospect Street

INFORMATION FOR READERS AND CONTRIBUTORS

The Journal is the official organ of The Medical Society of New Jersey, published monthly under the direction of the Committee on Publication. *The Journal* is released the first week of the month, and a copy is sent to each member of the Society.

Change of Address: Notice of change of address should be sent promptly to The Medical Society of New Jersey, P.O. Box 904, Trenton, New Jersey, 08605.

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THE JOURNAL OF THE MEDICAL SOCIETY OF NEW JERSEY

P. O. Box 904, Trenton, New Jersey 08605

STATE ACTIVITIES

Trustees' Minutes

December 18, 1966

A regular meeting of the Board of Trustees was held on December 18, 1966, at the Executive Offices. For your full information, detailed minutes are on file with the Secretary of your component society. A summary of the significant actions follows:

AMA Conference of State Mental Health Representatives . . . Authorized Chairman of MSNJ's Committe on Mental Health — Dr. Edward A. Schauer — to attend the AMA Conference of State Mental Health Representatives to be held in Chicago next month. If he is unable to attend, the former chairman — Dr. Robert S. Garber — is so authorized.

Public Hearing on Blue Shield Rate Increase . . . Directed that MSNJ's President attend the public hearing (in Trenton in February) concerning a requested increase in rates by Medical-Surgical Plan of New Jersey and make a strong statement in support of MSP's position.

Committee on Occupational Health, Workmen's Compensation, and Rehabilitation . . . Adopted the following amended recommendation:

That MSNJ request the Governor to appoint a representative from the Special Committee on Occupational Health, Workmen's Compensation, and Rehabilitation to the Workmen's Compensation Commission.

. . . Agreed that the names of at least three members — preferably those who hold membership in the Industrial Medical Association — be submitted to the Governor, with the suggestion that he designate one to the Workmen's Compensation Commission.

. . . Approved the following recommendation, which was prepared in response to a protest from a member of the Morris County Medical Society, concerning charges for services to workmen (state employees) under the Workmen's Compensation Law:

That the physician be entitled to his usual and customary fee, whether the services are rendered to state employees or private patients.

Committee on Revision of Constitution and Bylaws . . . Approved the following recommendations of the Ad Hoc Study Committee on Revision of Constitution and Bylaws:

1. That a reapportionment of voting strength within the Nominating Committee, as proposed in the (1966) Union County amendment, is not desirable because the populous counties — in consequence of their greater number of delegates — can proportionately influence the election itself and thus have a strong impact upon the choice of elected officials of the Society. To modify the present voting balance within the Nominating Committee might lead to discouragement of nominees from small counties and result in nominations from the floor that would unnecessarily lengthen the election sessions of the House of Delegates. (On September 18 the Board concurred in this opinion of the Study Committee.)

2. That an apportionment of county representation by redistricting the entire state is unacceptable because it would unnecessarily jeopardize other aspects of the organization and operation of the Society.

3. That the Morris County resolution to abolish the office of the "Eleventh Trustee" be approved.

4. That each Judicial District be represented by two Trustees for a membership up to 1,000, and that each Judicial District be entitled to one additional Trustee for each additional 1,000 members or major fraction thereof.

. . . Directed that recommendation #4 be held over until the January meeting, for action at that time.

AMA Clinical Meeting . . . Approved the report* submitted by MSNJ's delegates to the 1966 AMA Clinical Meeting in Las Vegas in November.

Finance and Budget Committee . . . Elected Dr. David Eckstein of Trenton, to fill the unexpired (1969) term of Dr. Samuel J. Lloyd as one of the Trustee-members of the Committee on Finance and Budget, to serve until the 1967 annual meeting.

Mercer County Medical Society . . . Directed

* See Christmas-New Year's 1966-67 *Membership News Letter* for the full report.

that correspondence from the Mercer County Component Society, recording itself officially "against that portion of Assembly Bill 11 which necessitates triplicate prescriptions, since it will not prevent the illegal traffic in drugs," be referred to the Council on Legislation.

New Jersey Neuropsychiatric Association . . . Denied the request of the New Jersey Neuropsychiatric Association to include at least one of its members on the Legislative Council of MSNJ, in accordance with established policy, as follows:

The Board recalled that, under MSNJ Bylaws, the Council on Legislation consists of 12 members — six of whom shall be elected by the House of Delegates and six appointed by the President — each for a three-year term. There is at least one elected and one appointed member from each Judicial District. The Bylaws also provide that candidates may be appointed by the President in the district in which a vacancy exists. The Bylaws also list the primary function of the Council, which is to study and evaluate legislation "proper to the interests of this Society."

It is not — and never has been — the function of committees or councils of the Society to represent specialty organizations. Since the Society is made up of members of many specialty groups, it would be discriminatory and unfair to favor one over the other.

The Board was unanimous in its conclusion that adequate provision is made for component societies to elect from the House — or to call to the attention of the President — any members who, they feel, could well serve MSNJ on councils/committees.

. . . Agreed that specialty societies could be invited to send one or two representatives to those meetings of the Council on Legislation in which legislation may be considered affecting their interests.

Board of Medical Examiners . . . Agreed to request the Board of Medical Examiners to prepare a complete declaration on the matter of acceptable internships, for publication in the MSNJ *News Letter*.

Health Facilities Planning Council of New Jersey . . . Unanimously renominated Dr. Louis F. Albright as a member of the Board of the Health Facilities Planning Council of New Jersey.

Extended Care Facilities . . . Accepted the report of our representative with the Health Department for the Medicare Program:

Of 280 extended care facilities in New Jersey, half have thus far applied for certification. Of these 280, only 18 have been certified for use on January 1, 1967. After a few minor adjustments, five more will be eligible for certification. It is estimated that an additional four more will be certified by the first of the year, bringing a total of approximately 2200 beds available under extended care facilities. Five counties in New Jersey will be without any certified extended care facility. The New Jersey State Department of Health is consulting with HEW and has promised to issue a general news release, calling attention of the public to these facilities and to the coverage offered.

New Accolade For Dr. Kalb

Dr. S. William Kalb, a member of our Essex County component, was named "Newarker of the Week" on December 5 last. He is the 14th person honored by the Prudential Company of America in its citizenship recognition program inspired by Newark's 300th Anniversary theme, "Pride in Newark." Dr. Kalb's picture, accompanied by a citation, was displayed throughout the week on a special easel in the company's Plaza Building on Broad Street, Newark. The citation, in part, reads:

"Dr. Kalb, for 41 years a dedicated physician and nutritional specialist, recently returned to Newark from civilian service in Vietnam, where he worked under the American Medical Association's Volunteer Physicians Program. His selfless service and devotion to the welfare of others earn him the praise and gratitude of our city."

The Future Physicians Club, which Dr. Kalb founded and still directs, oversees a program to develop high school students' interests and talents in medicine. The organization is now the recruiting arm of the American Medical Association, with branches in thousands of high schools. In the clubs, students learn about medicine by attending lectures, participating in discussions, and visiting hospitals to watch doctors in action.

Dr. Kalb, a native of Newark, received bachelor of science and pharmacy degrees from Valparaiso University and a medical degree from the Cincinnati Medical School. He practiced in Newark from 1930 until his retirement last February.

A former president of the American College of Nutrition, the New Jersey Gastroenterologic Society, and the Essex County Medical Society, he is a member of numerous medical, professional, civic, and service organizations. His books include "Your Body — Its Anatomy and Nutrition," "Your Future As A Physician," "Calories to Burn," "Calories for Passover,' and "Selected Calories for My Patient."

PHYSICIANS SEEKING LOCATION IN NEW JERSEY

(Listed in order of receipt)

The following physicians have written to the Executive Offices of MSNJ seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physician. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly of them.

GENERAL PRACTICE — Carl W. Pflug, M.D., 4141 North Clarendon Avenue, Chicago, Illinois 60613. St. Louis University Medical School 1964. Associate or partnership. Available July 1967.

INTERNAL MEDICINE—Alfred M. Derrow, M.D., 555 Wisteria Way, San Rafael, California 94903. Tufts 1962. Available, July 1968.

Philip R. Fleishman, M.D., 269B Eaton Crest Drive, Eatontown, New Jersey 07724. Downstate Medical Center 1961. Associate or partnership. Available July 1967.

William Pinsky, M.D., 410 Carmen Road, Amherst, New York 14226. University of Pennsylvania 1961. Associate—southern New Jersey. Available July 1967.

Joel E. Cannilla, M.D., Veterans Administration Hospital, 1400 Veterans of Foreign Wars Parkway, West Roxbury, Massachusetts 02132. Seton Hall College of Medicine 1960. Subspecialty — cardiopulmonary disease. Full or part-time hospital practice. Available July 1967.

Robert M. Amick, M.D., 58 Francis Street, Boston, Massachusetts 02115. Yale University School of Medicine. Board eligible. Group or institution. Subspecialty — cancer chemotherapy. Available July 1967.

Irwin Weiner, M.D., 1405 New York Avenue, Brooklyn, New York. University of New York (Downstate Medical Center) 1963. Subspecialty—gastroenterology. Partnership or group. Available July 1967.

Laurence Novick, M.D., 510 East 85th Street, New York, New York 10028. Chicago Medical School, 1961. Subspecialty — hematology. Partnership or group. Available July 1967.

Bukosky, Richard J., M.D., 11816 West Bluemound Road, Wauwatosa, Wisconsin 53226. Marquette 1960. Board eligible. Subspecialty — allergy. Available July 1967.

Ruppenthal, C. Robert, M.D., 2607 Hampshire Road, Cleveland, Ohio 44106. University of Pennsylvania 1960. Board Eligible. Subspecialty — hematology. Associate or group. Available July 1967.

NEUROLOGY — Michael H. Schuman, M.D. 249th General Hospital, APO 96267, San Francisco, California. New York University School of Medicine 1961. Private or group. Board eligible. Available August 1967.

OBSTETRICS AND GYNECOLOGY—Earl P. Gelman, M.D., 5896B Adams Street, Fort Knox, Kentucky 40121. Chicago Medical School 1960. Available March 1967.

OPHTHALMOLOGY—Paul Todtfeld, M.D., 1346B Werner Park, Fort Campbell, Kentucky, 42223. State University of New York (Downstate) 1961. Board qualified. Available July 1967.

PSYCHIATRY — Stephen J. Barrett, M.D., 593 Magellan Avenue, San Francisco, California. Columbia College of Physicians and Surgeons 1957. Avaliable summer 1967.

SURGERY —David M. Hirsch, Jr., M.D., 267 East Burlington Street, Riverside, Illinois 60546. University of Chicago 1959. Board eligible. General and thoracic.

Martin Seidenstein, M.D., Box 1696, 7th Field Hospital, APO San Francisco 96594. State University of New York 1959. Partnership or group. Available July 1967.

James D. Cozzarelli, M.D., 849A Birch Circle, Fort Devens, Massachusetts. George Washington University 1959. Partnership or group. Available July 1967.

Robert E. Lazarus, M.D., 1111 NW 19th Street, Miami, Florida 33125. Northwestern University 1962. Board eligible. Associate leading to partnership. Available June 1967.

New Appointment For Dr. W. Arthur Staub

Dr. W. Arthur Staub, of our Union County Medical Society, has just been appointed medical director for research at Becton, Dickinson and Company. Dr. Staub, a senior pediatrician at the Overlook Hospital in Summit and consultant to the Children's Hospital in Westfield, has long been active in civic and pharmaceutical affairs. He is a member of the board of directors of the local chapter of the American Red Cross, and has served as president of the Westfield Medical Society. Before going to Becton, Dickinson, he was a research pharmacist for Ciba. Dr. Staub is a veteran of World War II.

ETHICAL GUIDELINES FOR CLINICAL INVESTIGATION

At the 1966 Annual Convention of its House of Delegates, the American Medical Association endorsed the ethical principles set forth in the 1964 *Declaration of Helsinki* of the World Medical Association concerning human experimentation. These principles conform to and express fundamental concepts already embodied in the *Principles of Medical Ethics* of the American Medical Association.

The following guidelines, enlarging on these fundamental concepts, are intended to aid physicians in fulfilling their ethical responsibilities when they engage in the clinical investigation of new drugs and procedures.

1. A physician may participate in clinical investigation only to the extent that his activities are a part of a systematic program competently designed, under accepted standards of scientific research, to produce data which are scientifically valid and significant.

2. In conducting clinical investigation, the investigator should demonstrate the same concern and caution for the welfare, safety, and comfort of the person involved as is required of a physician who is furnishing medical care to a patient independent of any clinical investigation.

3. In clinical investigation *primarily for treatment* —

(A) The physician must recognize that the physician-patient relationship exists and that he is expected to exercise his professional judgment and skill in the best interest of the patient.

(B) Voluntary consent must be obtained from the patient, or from his legally authorized representative if the patient lacks the capacity to consent, following: (a) disclosure that the physician intends to use an investigational drug or experimental procedure, (b) a reasonable explanation of the nature of the drug or procedure to be used, risks to be expected, and possible therapeutic benefits, (c) an offer to answer any inquiries concerning the drug or procedure, and (d) a disclosure of alternative drugs or procedures that may be available.

(i) In exceptional circumstances, and to the extent that disclosure of information concerning the nature of the drug or experimental procedure or risks would be expected to materially affect the health of the patient and would be detrimental to his best interests, such information may be withheld from the patient. In such circumstances such information shall be disclosed to a responsible relative or friend of the patient where possible.

(ii) Ordinarily, consent should be in writing, except where the physician deems it necessary to rely upon consent in other than written form because of the physical or emotional state of the patient.

(iii) Where emergency treatment is necessary and the patient is incapable of giving consent, and no one is available who has authority to act on his behalf, consent is assumed.

4. In clinical investigation *primarily for the accumulation of scientific knowledge* —

(A) Adequate safeguards must be provided for the welfare, safety, and comfort of the subject.

(B) Consent, in writing, should be obtained from the subject, or from his legally authorized representative if the subject lacks the capacity to consent, following: (a) a disclosure of the fact that an investigational drug or procedure is to be used, (b) a reasonable explanation of the nature of the procedure to be used and risks to be expected, and (c) an offer to answer any inquiries concerning the drug or procedure.

(C) Minors or mentally incompetent persons may be used as subjects only if:

(i) The nature of the investigation is such that mentally competent adults would not be suitable subjects.

(ii) Consent, in writing, is given by a legally authorized representative of the subject under circumstances in which an informed and prudent adult would reasonably be expected to volunteer himself or his child as a subject.

(D) No person may be used as a subject against his will.

— Action of AMA House of Delegates in adopting Judicial Council recommendation of November 26, 1966.

ASSOCIATIONS BETWEEN DOCTORS OF MEDICINE AND OPTOMETRISTS

Q. May optometrists be employed as ancillary personnel to assist ophthalmologists?

A. It is not unethical for an ophthalmologist to employ an optometrist as ancillary personnel to assist him provided the optometrist is identified to patients as an optometrist and not as a doctor of medicine. The ophthalmologist has an ethical responsibility to take affirmative measures to make sure that patients will not be given the impression that the optometrist is also a doctor of medicine.

Q. May a physician teach in a school of optometry?

A. Since optometry is not a cult, physicians may, in accord with the provisions of Resolution 107 adopted in June, 1966, by the House of Delegates, teach in recognized schools of optometry for the purpose of improving the quality of optometric education. The scope of this teaching may embrace subjects within the legitimate scope of optometry which are designed to prepare students to engage in optometry within the limits prescribed by law.

— Opinion of the AMA Judicial Council, November 26, 1966.

MEETINGS OF MEDICAL INTEREST

This listing has been compiled by the Academy of Medicine of New Jersey. For additional information, including exact time of meetings, write to the society or hospital listed.

1967

February

8 Ocean County Medical Society

8 The Academy of Medicine of New Jersey
Orange Memorial Hospital
"Pulmonary Scans and Angiography in Thoracic Disease"

9 Burlington County Medical Society
Doctors-Lawyers Dinner

9 Somerset Hospital, Somerville
"Diets, Peptic Ulcer Disease"

14 The Academy of Medicine of New Jersey
Middlesex General Hospital, New Brunswick
"Care of the Alcoholic"

14 Bergen County Medical Society

14 Cumberland County Medical Society

15 Middlesex County Medical Society

15 Newark Beth Israel Hospital
"Arteriosclerosis in Vascular Diseases"

16 Morris County Medical Society
"Genesis of a Malpractice Suit"

16 Somerset Hospital, Somerville
"Urinary Tract Infections and Pyelonephritis"

17 The Academy of Medicine of New Jersey
"Ophthalmic Plastic Surgery"

21 Warren County Medical Society

22 Monmouth County Medical Society

23 Somerset Hospital, Somerville
"Refractory Anemia"

23 The Academy of Medicine of New Jersey
Rahway Hospital, Rahway
"Chromosomal Aberrations and Genetic Counseling"

28 The Academy of Medicine of New Jersey
Muhlenberg Hospital, Plainfield
"Ischemic Heart Disease"

March

1 The Academy of Medicine of New Jersey
Veterans Administration Hospital, East Orange
"Gastrointestinal Bleeding"

1 Camden County Medical Society

2 The Academy of Medicine of New Jersey
Hotel Essex House, Newark
Annual Urology Award Dinner
"Exstrophy of the Bladder"

7 Hudson County Medical Society
"Iatrogenic Disease of the Newborn"

8 Mercer County Medical Society
"Cancer Chemotherapy"

8 Ocean County Medical Society

9 Burlington County Medical Society

9 Essex County Medical Society

14 Bergen County Medical Society

15 Essex County Chapter of the New Jersey Neuropsychiatric Association

15 Middlesex County Medical Society

15 Newark Beth Israel Hospital
"Carcinoma of the Breast"

16 Somerset County Medical Society

16 Somerset Hospital, Somerville
"Bone Tumors"

16 Morris County Medical Society
"Hodgkin's Disease"

25 The Academy of Medicine of New Jersey
Montefiore Hospital, Bronx, New York
Workshop on Anesthesia

28 Cape May Medical Society

29 The Academy of Medicine of New Jersey
Robert Treat Hotel, Newark
"What's New In Cancer"

OBITUARIES

Dr. James S. Allan

At the grand age of 77, Dr. James S. Allan, a pioneer West Orange surgeon, died last month. A 1914 graduate of Vanderbilt, he was for many years active in the affairs of the Essex County Medical Society. And in 1964 he received the Society's Golden Merit Award, in recognition of his fifty years in active practice. Dr. Allan was an early Fellow of The American College of Surgeons, and was affiliated with the Orange Memorial Hospital.

Dr. Leon Cohen

Dr. Leon Cohen, a prominent south Jersey practitioner, died on December 12, 1966 at the age of 62. He was a 1929 graduate of the Medical School at Lavall University in Montreal. Dr. Cohen was a GP and, he used to say, "proud of it." He was on the internal medicine staff of the Camden County Hospital. He was active in Masonic circles and civic affairs in the Camden area.

Dr. Robert G. Hamilton

Announcement is made of the recent and untimely death of Robert Girard Hamilton, a prominent Essex County surgeon, and a senior attending surgeon at the Orange (NJ) Hospital Center. Dr. Hamilton was born in 1906 and received his M.D. in 1933 from Columbia University. He was a Fellow of the American College of Surgeons.

Dr. Luther M. Hartman

Known as a dedicated general practitioner of the old school, Luther Monroe Hartman suffered his second, and fatal, coronary occlusion on November 17, 1966. Born in Schulykill County, Pennsylvania, in 1901, he received his baccalaureate degree from Franklin and Marshall College in 1921, and his M.D. from Jefferson in 1925. He was awarded one of the coveted "Blockley" internships, and after two years at Philadelphia General Hospital he moved to our state and served the people of Southern New Jersey from 1927 until his untimely death. He practiced in Maple Shade and was on the staff of Camden's Cooper Hospital. He was active in the affairs of our Burlington County Medical Society.

Dr. John Brooks Sill

An emeritus member of the Mercer County Medical Society, Dr. John Brooks Sill died on November 30, 1966. He was 74 years old at the time of his death. Dr. Sill was a past-president of the Mercer County Component Society, a long-time chief of obstetrics at the Mercer Hospital, Trenton, and prominent in civic and professional affairs in the delaware valley. After his retirement he moved to Seaside Park, and became active in our Ocean County Society. Dr. Sill earned his M.D. at the University of Pennsylvania in 1919.

Dr. Frank Spano

At the age of 66, Dr. Frank Spano died of a coronary attack while dining in New York on December 21, 1966. Born in Italy, he came to the United States in childhood, and settled in Union City, New Jersey. He received his M.D. at the University of Maryland in 1926, and interned at the North Hudson Hospital. Dr. Spano did general practice with special interest in surgery. He was affiliated with both the North Hudson Hospital and the Christ Hospital. During World War II, he enlisted in the Navy and rose to the rank of commander. He was active in civic affairs and was vice-president of the local Board of Education at the time of his death.

Dr. Frank F. Thompson

"Our community," says the Montclair Times, "has lost one of its outstanding citizens, who leaves behind him a heritage of work well done, and an example of community service. The man who was thus mourned was Frank French Thompson, who died at the age of 50 after a prolonged illness. His death, which occurred on December 27, 1966, terminated the useful but too short career of Dr. Thompson. He received his M.D. at Howard in 1941, and like his father, Frank Thompson, Sr., he was an attending obstetrician at the Montclair Community Hospital.

BOOK REVIEWS

Peripheral Arterial Disease. Wiley F. Barker, M.D. (Vol. IV in the Series, "Major Problems in Clinical Surgery"). Philadelphia, 1966, Saunders Co. Pp. 229. Illustrated. ($8.50)

This text is for the broadly trained surgeon with more than just a passing interest in the intricacies of peripheral vascular surgery. It is not a vascular atlas in the true sense of the word, although many of the basic concepts of vascular surgery and technical approaches currently utilized are illustrated. Dr. Barker succinctly relates his total personal experience with vascular restoration of the aortiliac and femoropopliteal arterial systems. Admittedly, the author is a disciple of the "endarterectomy school." The procedures described favor this approach, but not to the exclusion of other vascular technics.

The chapters on anatomy, physiology, and pathology are concentrated, concise, factually pregnant, and require a knowledgeable vascular background for comprehensive absorption. The pathophysiologic correlations with clinical, inta-, and post-operative events are excellent. The line illustrations occasionally are bland and monotonous, and in many instances I felt the labelling and captions to be somewhat confusing. Some of the tabulations would have had a greater impact if they had been less congested and if a few figures had been included.

Dr. Barker has accomplished his primary purpose by relating his experience with 188 peripheral vascular procedures which are well documented to this reviewer. The strength of his presentation resides in its extensive and comprehensive list of current vascular references, all of which are most pertinent and some of which are truly classic reading for the vascular surgeon. This monograph assuredly belongs in the library of all surgeons performing peripheral arterial surgery. JOSEPH ALPERT, M.D.

Essentials Of Psychiatric Nursing. Ed. 7. Dorothy Mereness, R.N., Ed.D. and L. J. Karnosh, M.D., Sc.D. St. Louis, 1966, Mosby. Pp. 320 (with 6 charts and 14 illustrations). ($6.00)

This is the seventh edition of a well-known basic psychiatric nursing text. The authors open with a section which, they hope, will serve as an introduction or basis for discussion before the nursing student starts her psychiatric affiliation. This reviewer questions the amount of aid the student will receive from this section. For example, the chapter on communication is very vague and piously general. Many authorities are concerned with the difficulty in communicating with mentally ill patients. A beginning nursing student would need more specific guidelines to help her communicate with psychiatric patients. Too little here is said about non-verbal communications, its effectiveness, frequency, validation, and impact. The authors recognize non-verbal communication by simply advising the nurse to be careful. Since so much of non-verbal communication is motivated by the unconscious, this seems to be a very unsophisticated way of doing it.

The authors write: "Since anxiety is a basic concept in psychiatry and a key problem in the development of emotional problems, it will be discussed as a separate entity." Then they discuss this major concept for less than a page. How can the nurse be a therapeutic agent without a thorough knowledge of anxiety? Recognizing the patient's ability to understand (or even hear) the nurse depends on the nurse's knowledge of anxiety.

It is encouraging to see that the main body of the book is devoted to nursing approaches. The behavioral view of mental illness is used. This should encourage and stimulate the student to use the library and the very good references included at the end of each chapter.

A valuable adjunct to this edition is a too brief essay called "Assisting the Clinical Staff to Face the Problem of Suicide." This is a much needed discussion topic. Too many authors ignore it, and even here it should have been expanded. Another important addition was the discussion of the case reports presented. After some of the reports the authors pointed out the dynamic aspects of the symptoms presented. This is useful in helping the new student interpret patients' behavior and to understand motivation. One of the basic needs of every new student nurse is to understand the psychiatric patient's behavior. This book may serve as an approach toward this goal.

GLORIA MATTLIS, R.N., B.S.

The Alcoholic Personality. Veikko Tahka, M.D. Rutgers Center for Alcohol Studies, New Brunswick, New Jersey, 1966. Pp. 279 (129 tables and appendices). ($6.00)

What type of personality leads to uncontrolled drinking? This is the question which Dr. Tahka tries to answer in his study of alcoholics at St. Erik's Hospital, Stockholm, Sweden. The author's approach is exclusively psychoanalytic. Emphasis is placed on the oral, anal, adolescent, and progressive drinking stages of the developing alcoholic. The mother-son relationship is explored and, indeed, only alcoholics with living mothers were chosen for this study. Marked similarities were found in the mothers and in the alcoholics, but really no new findings were uncovered.

The dependency of the alcoholic is attributed mainly to their mothers. These women appeared lacking in feminine identity. They had married weak and ineffectual men whom they dominated. They were prouder of their motherhood than of their sons, considering them their private property. They used their sons to prop their narcissistic balance by prolonging babyhood. Any independent move on the part of the child was considered a threat against the role of the all-providing mother. The son drinks to rid himself of the mother.

Dr. Tahka argues that the chief difficulty in the treatment of alcoholics is the reluctance of the patient to admit his dependency on drink and his inability to control it. He clings to the idea of self-sufficiency and reverts to alcohol because it reinforces the feeling of omnipotence. Alcoholics Anonymous permits him to project this attitude of dependence and omnipotence outside of himself to a higher Power that is not human but all powerful. This affords a partial solution to his problem.

The book abruptly ends with the questionable conclusion that an alcoholic personality would develop other psychopathologic manifestations if alcohol were not available. THEODORE A. ANDERSON, M.D.

Resuscitation of the Newborn Infant. Edited by Harold Abramson, M.D. Second Edition. Pp. 411. Illustrated. Mosby, 1966, St. Louis. ($16.50)

This work offers a wealth of timely, lucid facts and information gathered together in a readily assimilable presentation. Much of the material is already familiar to practicing pediatricians and anesthesiologists, but almost each page supplies something of value to be tucked away for future application.

Excellent sections on newborn physiology and pathology, with newest ramifications, are presented in considerable depth. Obstetric considerations and effects on newborn are enumerated and discussed, and clinical diagnostic features of newborn distress are thoroughly covered. Resuscitation procedures are clearly illustrated and elucidated so that one only has to practice to remain proficient. One chapter illustrates excellent newborn nursery schemata with a complete checklist for nursery procedures.

An exhaustive appendix contains useful information in charts and compilations, including buffer systems, respiratory homeostatic mechanisms, blood standards, and virus classifications. The many tables and summary charts are well-directed and of daily use to all practitioners, especially those with contact with newborns.

The entire work is a singularly readable one.

LOUIS F. GARBEN, JR., M.D.

Condition Critical: Our Hospital Crisis. Edwin P. Hoyt. New York, 1966, Holt, Rinehart and Winston. Pp. 264. ($5.95)

"Malpractice," says Mr. Hoyt, "exists in our hospitals to a degree that is becoming alarming." He supports this by citing several lurid instances of neglect, even telling the reader how much money the plaintiffs made when they sued the hospital. Blue Cross is disposed of as "a bureaucracy which draws its money by taxing the people." He suggests that "Congress has made it clear that the burden for American health care does not rest on voluntary, state, or local programs, but that federal authority is accepting the burden." He cites several horrible examples of what happened when hospitals refused to admit patients brought into the emergency room, with no suggestion as to what proportion this is of all emergency room care. He describes the financial problems of hospitals, pointing out that 8 billion dollars of the 12 billion dollar cost of hospital operation is the amount spent for wages — though he does not suggest that unless wages are cut, hospital costs can't be reduced. In terms of health facilities, he characterizes our country as worse off than Russia, since they have one physician to every 529 persons, whereas our ratio is 1 to 710. New Jersey's emergency ambulance service, he says, "operated by volunteer rescue squads, provides the best trained and most effective ambulance service in America."

According to the book's dust wrapper, "patients, assuming that they get into a hospital at all, are alternately ignored and bullied. They are victimized by incompetence, unnecessary operations, and padded bills . . . and much, much worse. A measure of this abuse may be seen in the growing number of malpractice suits won by outraged patients or their survivors." The text actually is not quite as angry as the dust wrapper suggests. Still, one wonders how so many people escape from hospitals alive and well if the situation is really as "critical" as Mr. Hoyt suggests.

HENRY A. DAVIDSON, M.D.

Modern Home Remedies and How to Use Them. Morris Fishbein, M.D. New York, 1966, Doubleday. Pp. 127. ($3.95)

Can you imagine a short book by the most verbose author in American medicine? Well, here it is — 127 pages of common sense advice on self-medication by the dean of medical writers, beginning with painkillers and ending with insecticides. It covers such varied subjects as the do's and don'ts of douching and a synopsis on snoring. Although some of the chapters seem too short (as the two pages on feminine hygiene) and some too long (e.g., 17 pages on vitamins), it is well-balanced and stresses the remedies for which the most money is spent.

Especially well-written are the preliminary pages on sleeplessness, which end with a revised old proverb, "Early to bed, early to rise, and you meet no prominent people." These remarks are followed by advice on drugs, sleeping gadgets, and snoring — an excellent chapter! Equally good are the seven pages on constipation, which stress the over-concern of a bowel-conscious nation. This is succinctly summarized by Sir Arthur Hurst's suggestion that "people should be educated to the example of the dog rather than that of the cat, and never look behind them."

Dr. Fishbein's knack of describing a malady with simple lay terms is superbly illustrated by his description of hemorrhoids, which is so vivid it makes one squirm, or reach for a suppository.

The few critical remarks about the book are probably matters of opinion. Perhaps the statement that "in proper dosage, aspirin is safe even for infants" should be qualified by "except for those who may be allergic to it." And those who have had the experience of a difficult stool may not know that the remarks about dyschesia are directed to them. The paragraphs in the first chapter on the various home remedies seem unnecessary, since these are all discussed more completely in the chapters that follow. But the rest of this chapter wisely stresses the dangers of self-medication.

This book should sell, as most of Dr. Fishbein's have. It's a good one to recommend to patients and to doctors' wives — and maybe even to doctors!

JOHN S. MADARA, M.D.

Anatomy Of The Human Body. Henry Gray, F.R.S. 28th Edition. Revised and edited by Charles Mayo Goss, M.D. Philadelphia, 1966, Lea and Febiger. Pp. 1448. 1200 illustrations (most of them in color). ($22.50)

The new *Gray's Anatomy* is a tribute to many people, including the original author, Henry Gray, the publisher, the countless numbers of readers of the book who have suggested improvements, and the recent editor, Charles Mayo Goss. Reading is now made easier by the new two column format. Physicians and anatomists at all levels will find the book useful and workable. The new *Nomina Anatomica* has been adopted throughout. The chapter on surface anatomy has some very helpful photographs and shows what the well-muscled physician can look like.

The volume is printed and bound in a style appropriate to its high station. The new *Gray's Anatomy* (bear in mind this is the 28th edition, itself a tribute to its worth) continues to be without superior in its field.

ROBERT SPIRO, M.D.

ABSTRACTS

ON TUBERCULOSIS AND OTHER RESPIRATORY DISEASES. ISSUED BY THE NATIONAL TUBERCULOSIS ASSOCIATION

FEBRUARY, 1967 • VOL. XXXX, NO. 2

ROLE OF A HISTORY OF PERSISTENT COUGH IN THE EPIDEMIOLOGY OF LUNG CANCER

A history of persistent cough was found to be more common in a group of men with lung cancer than among the controls. However, because of the correlation between cigarette smoking and lung cancer, the role of cough independent of cigarette smoking could not be evaluated.

A history of persistent long-term cough is a common finding among patients with cancer of the lung. It is, therefore, of interest from both epidemiologic and diagnostic points of view to know whether such cough can affect the development of lung cancer.

The present study was carried out at the Memorial and James Ewing Hospitals in New York City. Interviews were held with 150 men with squamous or oat cell lung cancer and also with 300 men of comparable age without cancer of the respiratory tract, genitourinary cancer, or cancer of the upper alimentary tract, who served as controls. All the patients were consecutive hospital admissions.

In addition to the usual background questions, the patient was asked whether he coughed and produced phlegm. A "cougher" was defined as one who had coughed on most days of the year for at least a year. Questions concerning previous history of cigarette smoking were also asked. The median age of the study group and controls was in the 60- to 69-year period.

A history of persistent cough was found to be significantly more common in the group with lung cancer than in the control group, 69 per cent of the lung cancer patients giving a long-term history of persistent cough and 45 per cent of the control group. The majority of the coughers in both groups brought up phlegm in the morning.

Cigarette Smoking

As for smoking, all those with lung cancer were smokers, whereas 14 per cent of the control group had never smoked. Of the smokers, 97 per cent of those with lung cancer were cigarette smokers compared with 69 per cent of the control group. Fifty-five per cent of the patients with lung cancer smoked 30 or more cigarettes a day compared with 22 per cent of the controls.

Patients with lung cancer had a somewhat greater tendency to cough than did the controls. Among those smoking 20 to 29 cigarettes a day, the patients with lung cancer had a significantly greater history of cough than the controls did. The difference in cough in those who smoked less was not significant.

Since the number of cigarettes smoked is not the sole indicator of the smoke exposure of a given smoker, several other factors were considered. One of these was the duration of smoking. Sixty-four per cent of the patients with lung cancer had smoked for more than 40 years compared with 42 per cent among the control group.

Ernest L. Wynder, M.D. and E. Payson Fairchild, Jr.: *American Review of Respiratory Disease*, November, 1966.

Another factor considered was the length of cigarette smoked. Of the patients who smoked 20 to 29 cigarettes a day, 86 per cent in the cancer group and 77 per cent of the controls smoked from three fourths of the length to the end of the cigarette. Of those who smoked 30 or more cigarettes a day, 82 per cent in the cancer group and 71 per cent of the controls smoked at least three fourths of the cigarette. The differences, though not large enough to be significant, were consistent.

There were no significant differences in claimed inhalation between the study and control groups among those who smoked 20 or more cigarettes per day. All 14 patients with lung cancer who smoked less than 20 cigarettes per day stated that they inhaled, whereas in the comparable control group, 21 per cent stated that they did not inhale. In the *number* of cigarettes smoked in the 20 to 29 category, 24 per cent of the cancer patients smoked 25 to 29 cigarettes a day compared with 16 per cent of the controls.

Duration of Smoking

In the 20 to 29-cigarettes-a-day category, patients with lung cancer had smoked for a longer period of time, smoked their cigarettes to a shorter butt length, and smoked more cigarettes within the category than the controls. In addition, a larger percentage of the "light" smokers in the cancer group (those smoking less than 20 cigarettes a day) inhaled. These factors contribute to a greater intensity of cigarette smoking in the cancer group as compared with the control group. Whereas some of these differences are not significant, since the numbers involved are small, there appears to be a definite and consistent trend.

A significant difference was found in the history of persistent cough between lung cancer and control patients, a finding based on smokers who said they smoked less than 30 cigarettes a day. If cough, independent of cigarette smoking intensity, increases the risk of lung cancer in a cigarette smoker, it might be assumed that persistent cough would have been reported more frequently among the patients with lung cancer smoking 30 or more cigarettes a day than among the control group. However, no differences in terms of long-term cough were found.

Of epidemiologic interest is the finding that simple chronic bronchitis (or long-term persistent cough) among English smokers is not greater than among American smokers, and yet the incidence of lung cancer is much higher in Britain. This does not exclude the possibility that chronic bronchitis with recurring infections, a condition more common in Britain than in America, may contribute to lung cancer.

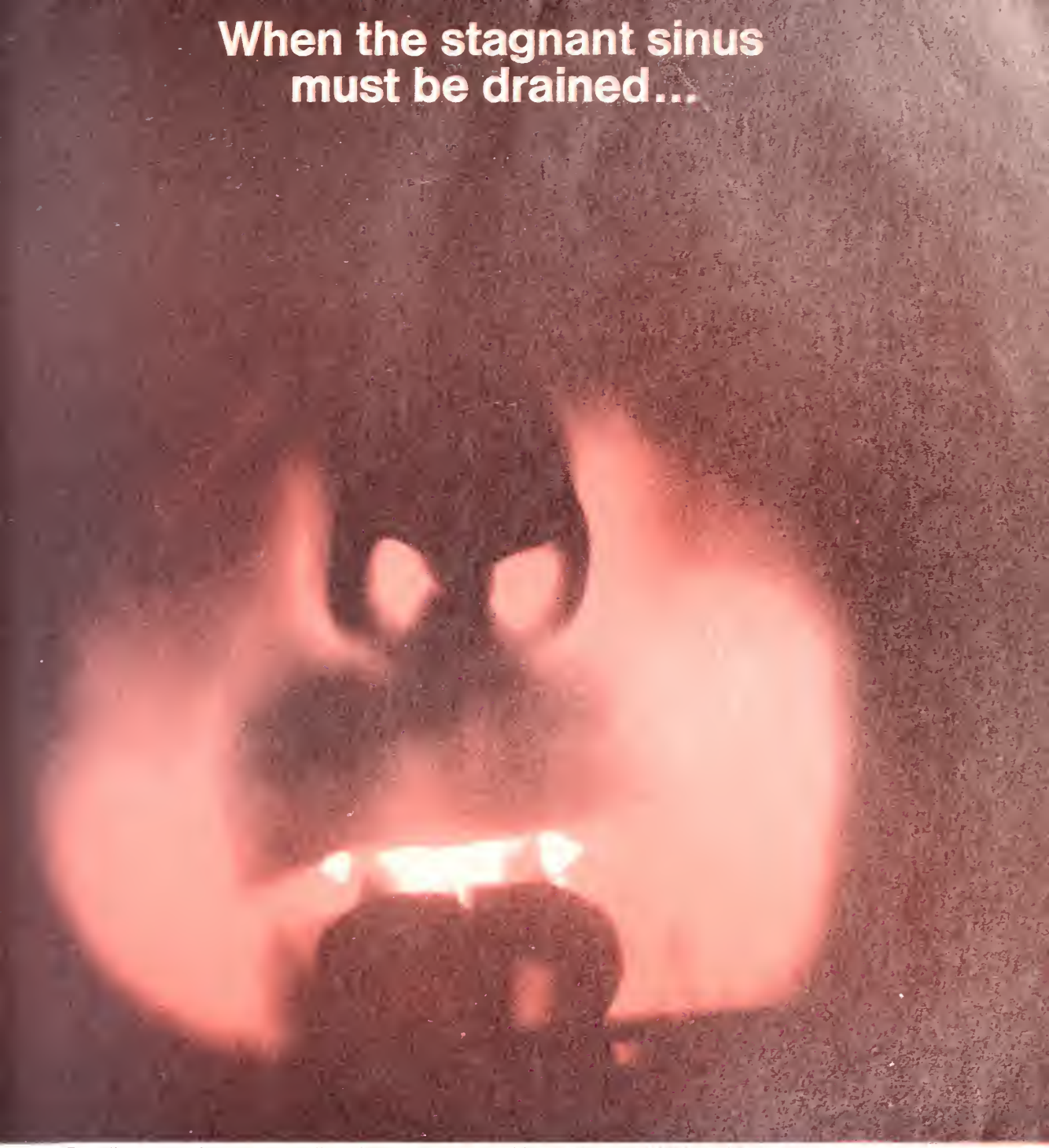
The question arises whether the pathologic changes associated with persistent cough (simple chronic bronchitis) might enhance, by some specific biochemical process, respiratory carcinogenesis. Since studies of ex-smokers have indicated that persistent cough disappears rapidly upon cessation of smoking, it would seem that at least some of the pathologic alterations leading to such cough are reversible.

This consideration does not exclude the possibility that persistent long-term cough, although not etiologically related directly to lung cancer, could indicate that an individual whose respiratory epithelium has been altered enough to lead to cough may be more susceptible to the carcinogenic effects of cigarette smoke in the biochemically increased absorption and relation of certain smoke components.

In view of various epidemiologic considerations, evaluated for consistency and biologic meaningfulness, it appears that long-term persistent cough or simple chronic bronchitis has not been established as increasing an individual's risk of lung cancer, independent of cigarette smoking.

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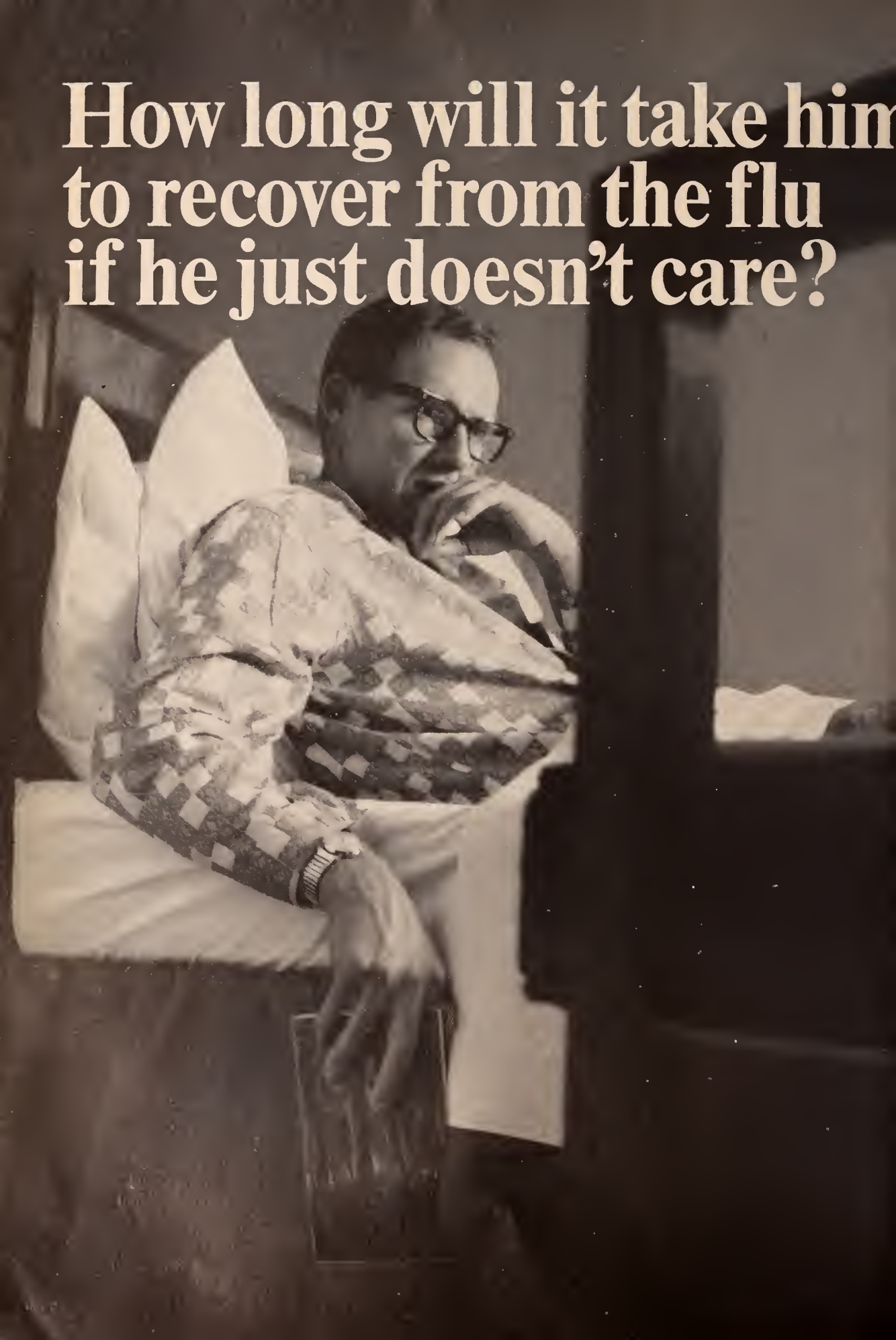
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TUBEX sterile cartridge-needle units are prefilled with measured doses. Each unit is used once, and discarded. This eliminates danger of cross contamination, as well as problems of sterilization, storage, and measurement. Ultra-sharp, siliconized needles keep patient discomfort to a minimum. No other injectable system is easier to use, easier to store, easier to carry.

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4 New TUBEX® Sterile
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Vitamin B Complex with Vitamin B_{12}
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Hydroxocobalamin, 1000 mcg./cc.
Thiamine HCl, U.S.P., 100 mg./cc.

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Sterile Cartridge-Needle Unit
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New from Du Pont

Symmetrel

(Amantadine HCl)

The first oral chemical virostat for the prevention of influenza A_2



Influenza virus
Protein shell enclosing the core of nucleic acid (RNA)—artist's representation

The incidence of influenza A_2. In this country, where influenza is one of the leading causes of morbidity, influenza A_2 (Asian) continues to be a serious medical problem. In 1957 influenza A_2 was responsible for approximately 40,000 excess deaths in a three-month period. Since that year the most prevalent influenza virus has been A_2 (Asian).

What is Symmetrel®? "Symmetrel" (amantadine HCl) is a new synthetic chemical which acts as a molecular barrier to virus penetration. It provides for the first time specific oral medication for the prevention of respiratory infections caused by influenza A_2 (Asian) viruses—an entirely new approach in preventive medicine.

For prescribing information, see last page of this presentation

What Symmetrel® (amantadine HCl) means to you

...the first and only oral chemical agent to prevent influenza A_2 (Asian).

...not a vaccine or antibiotic, but a new synthetic chemical unrelated to any other chemotherapeutic agent.

...unique mode of action: prevents virus penetration of the host cell without affecting vital cell functions.

...specifically active against all influenza A_2 viruses tested to date.

...not indicated for the prevention of influenzal or respiratory illness other than influenza A_2 or for the treatment of established disease.

...does not interfere with normal antibody response; acts in concert with pre-existing antibody.

What Symmetrel® means to your patient

...possible immediate influenza A_2 protection when taken following suspected contact.

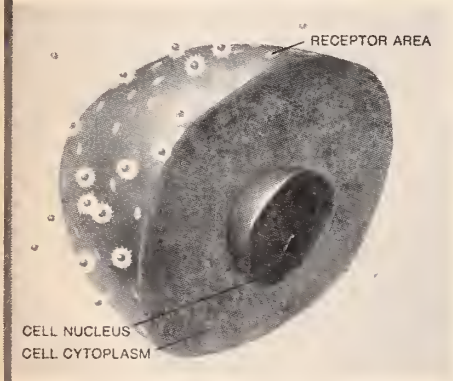
...may be particularly useful during outbreaks or epidemics and for high-risk patients in whom the occurrence of influenza A_2 is especially hazardous.

...a high degree of safety in clinical use.

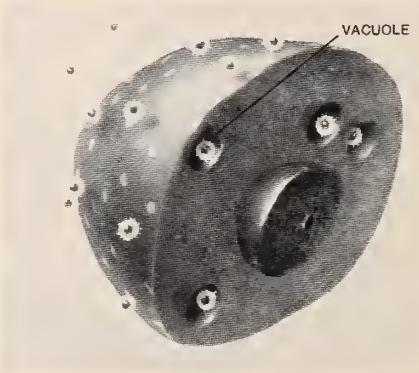
...simple once daily or b.i.d. dosage.

The mode of action of Symmetrel®

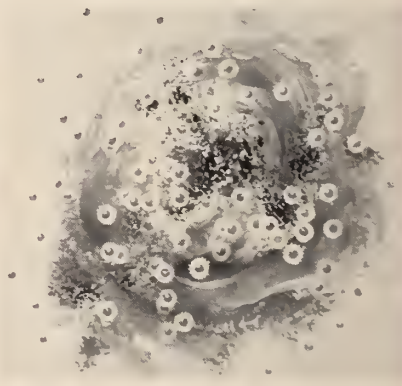
How the influenza virus invades and destroys the untreated cell



1 Viruses outside the cell attach themselves to specific cell receptor areas



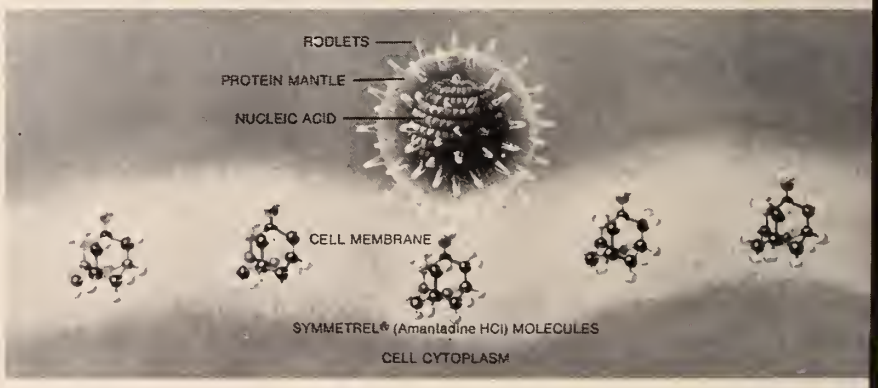
2 The virus is incorporated into a vacuole within the cell. From this vacuole the virus nucleic acid passes into the cell cytoplasm



3 The virus nucleic acid then directs the cell to produce both new virus nucleic acid and virus protein coat material which aggregate to form new virus particles. This process leads to the release of new virus particles and eventual destruction of the cell

How Symmetrel® (Amantadine HCl) prevents virus invasion[1]





Our current knowledge leads us to believe "Symmetrel" acts as a molecular barrier to influenza virus penetration. Shown here in a greatly enlarged section, "Symmetrel"— located at the cellular membrane—effectively prevents (blocks) virus penetration. Thus, "Symmetrel" does not directly destroy the virus particle but acting as a virostat prevents the cycle of virus penetration, virus replication, and cell destruction that is characteristic of virus invasion of animal cells (tissue). *Artist's conception based on current scientific knowledge.*

1. "Mode of Action of the Antiviral Activity of Amantadine in Tissue Culture", Hoffmann, C. E.; Neumayer, E. M.; Haff, R. F.; and Goldsby, R. A., Journal of Bacteriology *90*,623 (1965).

Safety of Symmetrel® Confirmed. When used as indicated, is generally well tolerated. No kidney, liver, bone marrow, or hematological disturbances have been observed.

Prescribing Information

Indications: "Symmetrel" is indicated for the prevention (prophylaxis) of influenza A_2 in persons of all age groups. Early use is recommended, preferably before or as soon as possible after actual or suspected contact with individuals suffering from influenza A_2. "Symmetrel" should especially be considered for high influenza-risk patient groups such as those suffering from chronic debilitating diseases and elderly persons.

Contraindications: Not indicated for the prevention of influenzal or respiratory illness other than influenza A_2 or for the treatment of established disease.

Warnings: Administration to patients with central nervous system disease, particularly geriatric patients with cerebral arteriosclerosis, and patients with a history of epilepsy or other "seizures," requires strict observation for possible untoward effects (see Adverse Reactions). Patients taking psychopharmacologic drugs, central nervous system stimulants, or alcoholic beverages should be observed for possible evidence of intolerance. Those patients who experience central nervous system effects or blurring of vision should be cautioned against driving or working in situations where alertness is important.

No teratogenic effects have been seen in reproductive studies in rats and rabbits. Studies in pregnant women have, however, not been done and use of this drug in women of childbearing age should be undertaken only after weighing the possible risks to the fetus against benefit to the pregnant patient. It should not be administered to nursing mothers since it is not known whether the drug is secreted in the milk.

Precautions: Ineffective against bacterial infections. Patients should be observed for idiosyncratic reactions as with all new drugs. Geriatric patients with pre-existing serious medical illnesses with mental or physical deterioration should be followed carefully medically while taking "Symmetrel." (See Adverse Reactions.)

Adverse Reactions: With higher than indicated doses manifestations of central nervous system effects such as nervousness, insomnia, dizziness, lightheadedness, drunken feeling, slurred speech, ataxia, inability to concentrate and some psychic reactions including depression and feelings of detachment were seen. Occasional blurred vision was reported at higher doses. Some of the milder and less pronounced symptoms above have been reported in a small number of patients taking the recommended dosage of 200 mg per day. Those were mostly transient and disappeared with continued administration of the drug. Some geriatric patients developed paranoid or hallucinatory behavior and became unmanageable while taking 200 mg daily. Medically unselected seriously deteriorated geriatric patients showed poor clinical tolerance after several weeks of daily dosing with 200 mg per day. One elderly patient with a history of prior cerebrovascular accident developed visual hallucinations and grand-mal convulsions while on drug at 800 mg per day. Some cases of dry mouth, gastrointestinal upset and skin rash and rarely, tremors, anorexia, pollakiuria, and nocturia have been also reported.

Safety: When used as indicated, is generally well tolerated. No kidney, liver, bone marrow, or hematological disturbances have been observed.

Dosage: *Adults:* Two 100 mg capsules (or 4 teaspoonfuls of syrup) as a single daily dose or the daily dose may be divided into one capsule of 100 mg (or 2 teaspoonfuls of syrup) twice a day.

Children: 1 yr.—9 yrs. of age: Calculate total daily dose on the basis of 2 mg to 4 mg per pound of body weight per day (but not to exceed 150 mg per day). Daily dose, given as the syrup, should be given in 2 or 3 equal portions.

9 yrs.—12 yrs. of age: Total daily dose 200 mg given as one capsule of 100 mg (or 2 teaspoonfuls of syrup) twice a day.

How Supplied: *Capsules:* Bottles of 100. Each red, gelatin capsule contains 100 mg amantadine HCl.
Syrup: Bottles of 1 pint. Each 5 ml (1 teaspoonful) contains 50 mg amantadine HCl.

DUPONT

Symmetrel®

(Amantadine HCl)

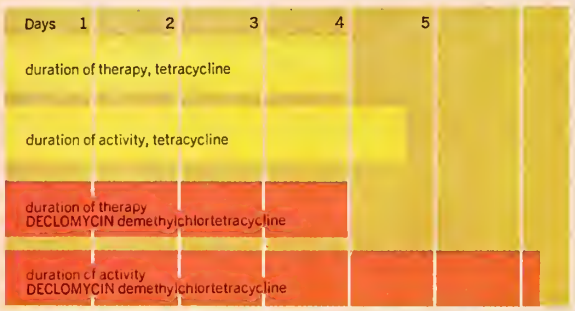
A molecular barrier to virus penetration

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1-2 "extra" days' activity
after the last dose to protect against relapse

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Effective in a wide range of everyday infections—respiratory, urinary tract and others—in the young and aged—the acutely or chronically ill—when the offending organisms are tetracycline-sensitive.

Contraindication—History of hypersensitivity to demethylchlortetracycline.

Warning—In renal impairment, usual doses may lead to excessive systemic accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort.

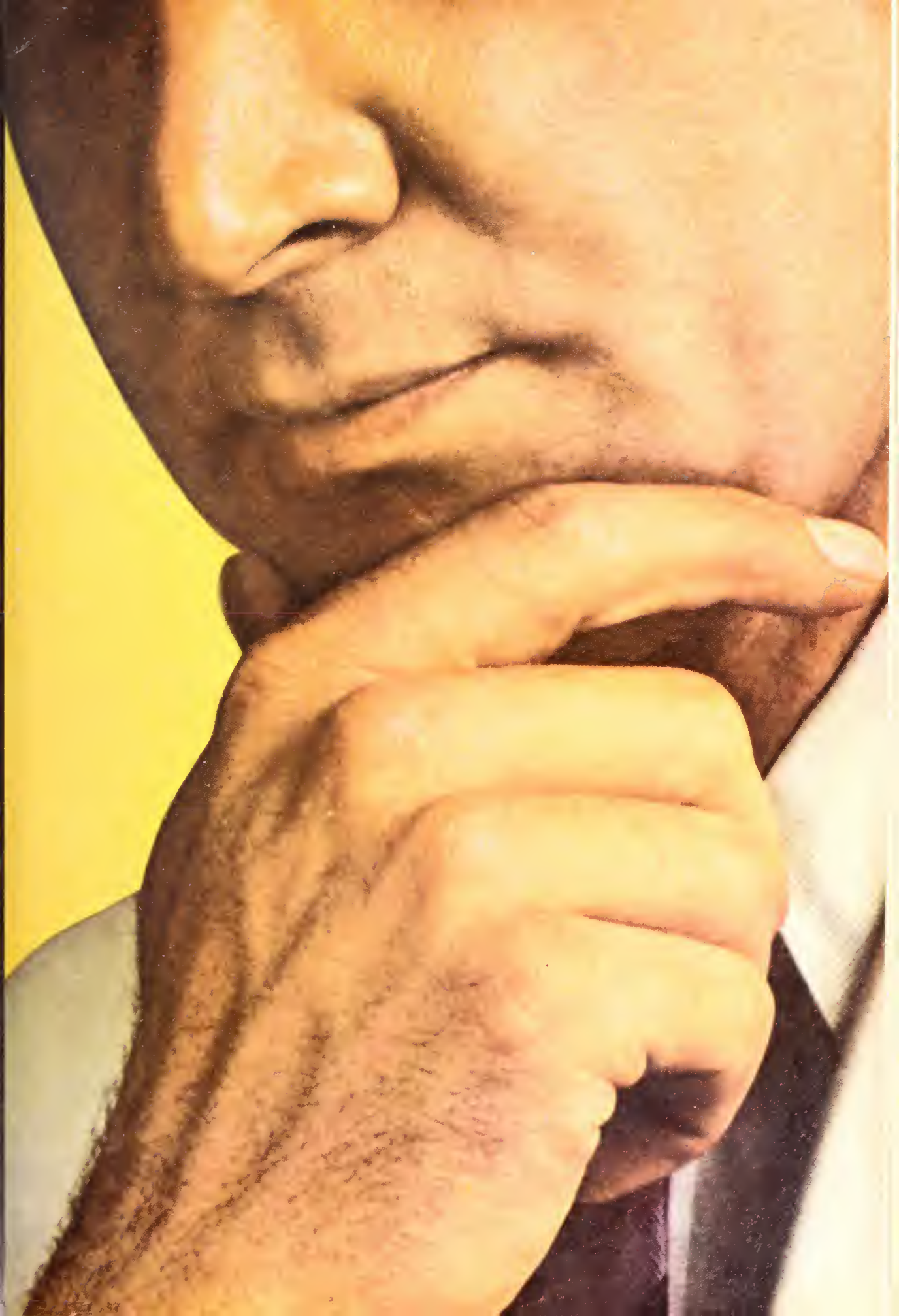
Precautions and Side Effects—Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. Use of demethylchlortetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect occurs mostly during long-term use but has also been observed in short treatment courses. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment. Side reactions include glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and dermatitis. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Anaphylactoid reactions have been reported.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products.

Capsules: 150 mg; *Tablets:* film coated, 300 mg, 150 mg, and 75 mg of demethylchlortetracycline HCl.

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Precautions: Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.

Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness.

Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia, the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

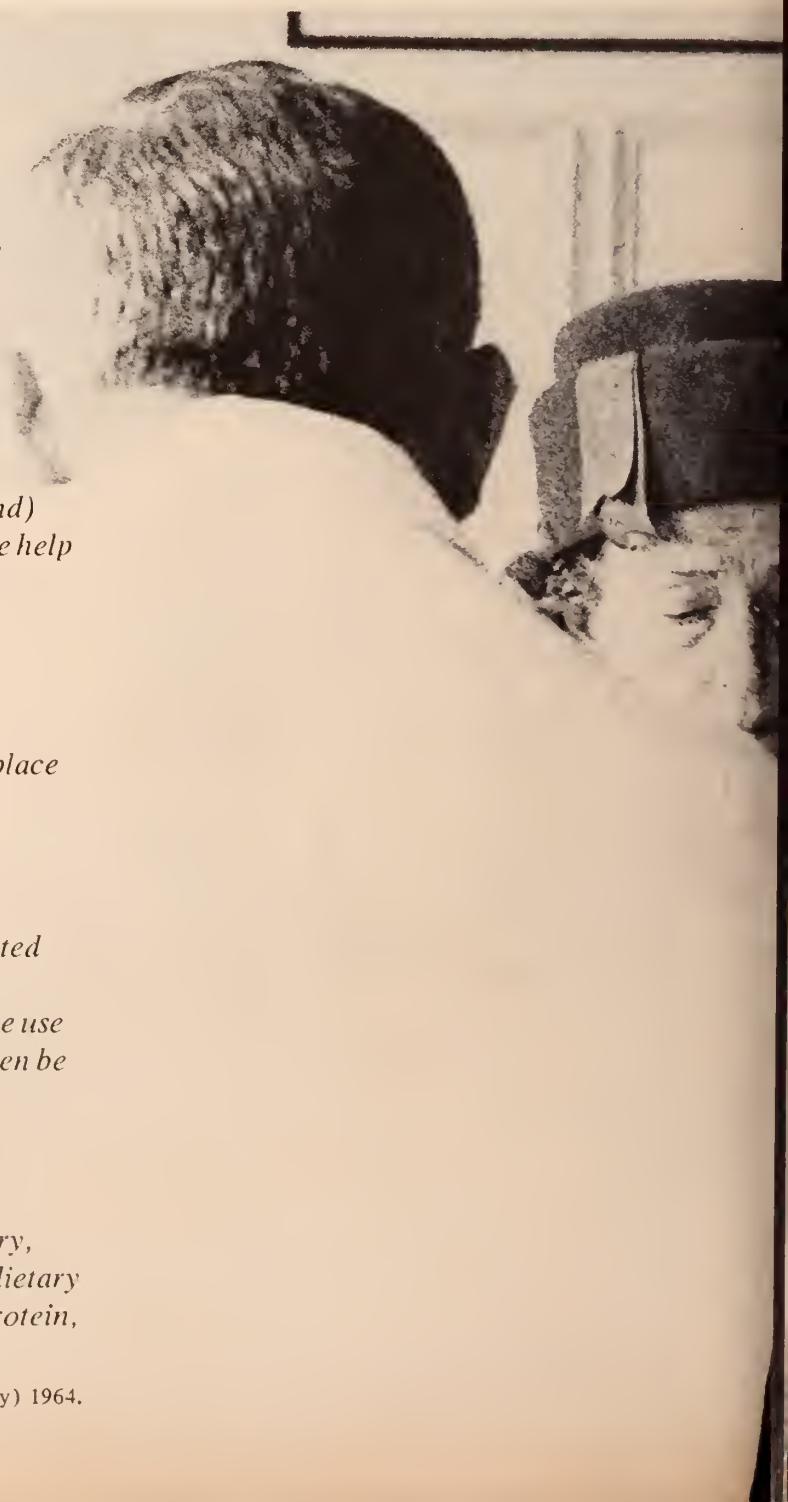
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McNeill, A. J.: Clin. Med. *8*:518 (Mar.) 1961.

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Arnold, E. T., Jr.: Geriatrics *12*:612 (Oct.) 1957.

"Nutritional and hormone bolstering of function in the aged may have a useful place in geriatrics."

Morgan, A. F.: Gerontologist *2*:77 (June) 1962.

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Morgan, A. F.: Gerontologist *2*:77 (June) 1962.

"Intensive nutritional therapy is necessary, especially in elderly people, to correct dietary deficiencies created by large losses of protein, vitamins and other nutrients."

Riccitelli, M. L.: J. Am. Geriatrics Soc. *12*:489 (May) 1964.

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MEDIATRIC also provides *nutritional reinforcement—blood-building factors and vitamin supplementation.* It contributes a *gentle "mood" uplift* through methamphetamine HCl.

Three different dosage forms—Liquid, Tablets, and Capsules—offer convenience and variety.

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Each 15 cc. (3 teaspoonfuls) contains:

Conjugated estrogens—equine (Premarin®)	0.25 mg.
Methyltestosterone	2.5 mg.
Thiamine HCl	5.0 mg.
Cyanocobalamin	1.5 mcg.
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Contains 15% alcohol

MEDIATRIC Tablets and Capsules

Each MEDIATRIC Tablet or Capsule contains:

Conjugated estrogens—equine (Premarin®)	0.25 mg.
Methyltestosterone	2.5 mg.
Ascorbic acid	100.0 mg.
Cyanocobalamin	2.5 mcg.
Intrinsic factor concentrate	8.0 mg.
Thiamine mononitrate	10.0 mg.
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Niacinamide	50.0 mg.
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Methamphetamine HCl	1.0 mg.

Orally active, water-soluble conjugated estrogens derived from pregnant mares' urine and standardized in terms of the weight of active, water-soluble estrogen content.

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SIDE EFFECTS: In addition to withdrawal bleeding, breast tenderness or hirsutism may occur.

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In the female: To avoid continuous stimulation of breast and uterus, cyclic therapy is recommended (3 week regimen with 1 week rest period—Withdrawal bleeding may occur during this 1 week rest period).

In the male: A careful check should be made on the status of the prostate gland when therapy is given for protracted intervals.

SUPPLIED: No. 910 – MEDIATRIC Liquid, in bottles of 16 fluidounces and 1 gallon. No. 752 – MEDIATRIC Tablets, in bottles of 100 and 1,000. No. 252 – MEDIATRIC Capsules, in bottles of 30, 100, and 1,000.



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this issue: the nose as a shock organ

the nose as a shock organ

by Charles J. Shagoury, M.D., Chelmsford, Massachusetts



"Is it a cold, hay fever, or has he been reprimanded by his boss?" Occasionally, you will ask yourself this question when confronted by a patient with abrupt onset of rhinorrhea, nasal obstruction, and sneezing. Usually the history will elucidate the problem, but examination of the nose will often provide valuable clues to the correct diagnosis.

The nose is a shock organ in a double sense. First, it is in the nose that the confrontation takes place with the surrounding atmosphere. For twenty-four hours a day, the nose must meet the varying challenges of the inspired air, containing perhaps noxious chemicals, dust, dirt, bacteria, viruses, fungi, and industrial pollutants of all kinds, and render it clean, virtually sterile, and fit for the sensitive alveoli of the lungs. Whatever the temperature or humidity of the atmosphere, the nose must transmit it to the lungs at approximately 98°F, and with a humidity of approximately 40%.[1]

Second, in particularly susceptible patients, the nose acts as a shock organ in a manner totally unrelated to its normal function. Persons with hay fever respond to ordinarily harmless materials by extreme nasal congestion, with marked rhinorrhea and violent spasms of sneezing. In some patients, exposure to threatening or disagreeable agents, or situations involving mental conflict may result in a reaction which is exclusively nasal, with swelling of the turbinates, and marked hypersecretion.[2]

Nasal symptoms usually result when the nose seeks to perform its function of getting rid of noxious and dangerous elements in the atmosphere, and prevent their admission to the trachea and lungs. Small particles are removed by the mucous coating which blankets the nasal passages. This mucous blanket contains a bacteriostatic agent, lysozyme, which destroys most air-borne bacteria.[3] The mucinous content renders the surface sticky, causing dusts and small particles to adhere. It has been postulated that this process is rendered more effective through adsorption because of a surface electrical charge on the nasal mucosa.[4] The cilia then sweep the particulate matter to the pharynx. The nose can prevent entrance into the lungs of particles as small as three microns in diameter, but smaller particles elude the nasal barrier. Most bacteria causing respiratory infections are one to three microns in diameter, but since they usually are inhaled in clumps, they are efficiently removed as a rule. Viruses, which are of the order of 1/1000 of this size, are less efficiently dealt with, unless they occur in very large aggregates.[5]

The nose will react in a more or less similar manner, whatever the nature of the offending agent, whether it be an irritant chemical, virus, pollen, or distasteful emotional situation. In acute coryza, the most characteristic sign is a profuse watery discharge. The volume of secretion may rise from practically nothing to nearly 60cc in twenty-four hours.[6] The mucous membrane is reddened and engorged, while the turbinates are markedly swollen. After the first day or two, the secretion becomes thicker, yellowish, and more difficult to expel. The surface cells are largely destroyed, contributing to the copious discharge, which now also contains numerous inflammatory cells which have migrated to the area. Gradually, over a period of a few days, or a week, the flood abates, the swelling and redness subside, and the nasal epithelium resumes a healthy appearance.

Repeated attacks of rhinitis, particularly if there is an underlying element of obstruction, may result in chronic rhinitis. The mucous membrane is constantly swollen and reddened. Sticky, mucopurulent secretions are a continuous feature, and the glandular elements are hypertrophied. Commonly, the mucosal surface takes on an irregular, rounded "mulberry" appearance, and nasal passages are occluded by the swollen turbinates and redundant mucosa.

While all of us are susceptible to colds, the victim of hay fever, or allergic rhinitis, displays a marked nasal reaction to materials in the air which leave his associates unaffected. In such a patient, the nasal mucosa has become an allergic "shock" organ. Contact with the nasal allergen causes local release of histamine, with vasodilatation, increased vascular permeability, and severe nasal congestion, similar to the "wheal" and "flare" reactions in the skin, when the epidermis is the allergic shock organ. While we eagerly await the coming of spring, the hay fever sufferer dreads the blooming season, whose invisible pollens are poisons to his sensitive nose. His neighbor's cat or dog may provoke paroxysms of uncontrollable sneezing. In some cases a specific allergen is not identified, but the triad of rhinorrhea, nasal obstruction, and sneezing is present.[7] The nose in these cases shows a pale, boggy, edematous mucosa, with a thin mucoid secretion. The mucous membrane shows extreme retractility to 1% cocaine or ephedrine. If the patient has medicated himself prior to examination, the nasal passages may appear abnormally patent, or show exaggerated congestion due to rebound reaction. The secretion may show a large number of eosinophils particularly after an attack of sneezing or rhinorrhea. Touching the mucosal surface, especially of the inferior turbinate, leaves an indentation, showing that the swelling is due to stasis and edema, rather than actual hyperplasia of the mucous membrane as in chronic hypertrophic rhinitis. Though the pale swollen mucosa is the hallmark of allergic rhinitis, as usually seen by the physician, exposure of allergic subjects to their known allergens results in a brief hyperemic phase, followed by pallor and edema.[8]

In the later stages of allergic rhinitis, the chronic edema of the mucous membrane results in the formation of polyps, clusters of grape-like masses hanging from the roof of the nose, with a pale glistening surface, contributing significantly to the sense of nasal obstruction and oppression.

A large group of patients show symptoms of nasal congestion when confronted by adverse life situations.[9] In these unfortunate persons, anxiety, frustration, and resentment are often accompanied by a runny nose and nasal obstruction. Lacrimation adds to the nasal stuffiness. This autonomic response, mediated by the parasympathetic nervous system, may be part of a general parasympathetic reaction, or may possibly represent in part, a symbolic effort to wash out and crowd out the offending situation.

Nasal congestion may also occur in some patients at times of sexual stimulation, and in women during menstruation and pregnancy, even to the point of epistaxis.[10] The relationship is obscure; castration results in atrophy of the nasal glands, and their action is inhibited by the hormones of the hypophysis and the thyroid.[11] The nose may be the shock organ in drug therapy. The nose may also bear the brunt of industrial stress, in those who work in a hot dry atmosphere, or those exposed to acid fumes, or irritating dusts. As the air in our cities is increasingly polluted by exhaust fumes, and industrial irritants, whole urban populations may suffer from chronic nasal and respiratory symptoms.

Of course, nasal reactions are not just infectious, or allergic, or emotional. Particularly in the chronic sufferers, there is an interdependence of all three. Death of a relative, or other psychic shock can pre-

(concluded on following page)

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For postnasal drip, clogged ears and stuffed and runny noses

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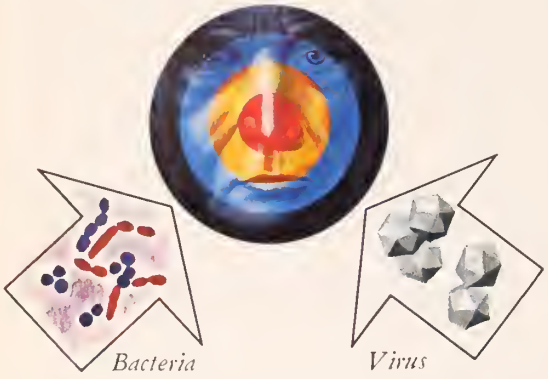
keep patients comfortable 'round the clock. 24-hour decongestion on just a single tablet dosed morning, mid-afternoon and at bedtime. Patients regain senses and can breathe, smell and taste again.

Triaminic. Isn't that a comforting thing to know?

Side effects: Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. Precautions: The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

(Advertisement)

cipitate an attack of rhinorrhea in hay fever sufferers.[12] Others develop attacks of vasomotor rhinitis following change in temperature, chilling, or exposure to the sun, or simply warm bedclothes.

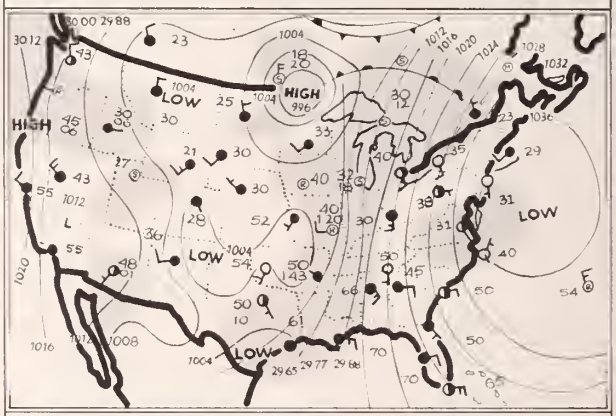


The complex interplay of allergy and infection is largely unclear. Allergy to the viruses and bacteria which cause infection has been postulated, but is difficult to demonstrate. The swollen obstructed allergic nose is more susceptible to infection. At the same time, infection often precedes or precipitates an allergic attack. Exposure of a susceptible patient to an allergen can activate latent virus organisms leading to infection.[13] This "jolt" reaction represents a summation of an allergen and a virus leading to symptoms in the nose as a shock organ, which neither could have produced alone. In childhood, repeated attacks of bronchitis and colds may be inflammatory reactions to an allergen, or precipitated by exposure to an allergen. These children may later develop typical allergic rhinitis. On the other hand, children with typical allergic histories, eczema, asthma, and allergic familial backgrounds, may later develop typical infectious rhinopathies. Skin tests in such patients are usually positive.

Nasal reactions are part of the systemic response of the patient to an unwelcome stimulus. In cases of respiratory infection and exposure to atmospheric irritants, the reactions are useful, and to some extent desirable. They are usually self-limited, disappearing within a few days, or upon removal of the provoking agent. Here the distressing symptoms can be ameliorated with appropriate decongestant agents, or, in the case of severe or complicated respiratory infections, antibiotics may be given, with reasonable confidence of a cure. On the other hand, when nasal reactions are the peculiar response of an individual to an allergen, or to an undesirable situation, they serve no useful purpose. The nose here is a shock organ in a stressful situation, but can furnish no response of value. It merely causes the patient symptoms which add to his problems. In these cases, symptomatic treatment is of great benefit, but often the underlying faulty pattern of response cannot be altered. Such a patient may literally be considered to be paying his way in life "through the nose."

References 1. Maures, E. R., Mendez, F. C., Jr., and Hilsinger, R. C.: Importance of the Nose in Filtering and Humidifying Inspired Air. Ohio State Med. J. 61:41-42. 2. Holmes, T.,Goodell H., Wolf, S., and Wolff, H. G.: The Nose. Springfield, Ill. 1950 Charles C. Thomas p. 10 ff. 3. Boies, L. H. R.: Fundamentals of Otolaryngology. Phila. W. B. Saunders Co. 1954 p. 160. 4. Proetz, A. W.: Applied Physiology of the Nose. St. Louis 1941 Zimmerman-Petty Co. p. 6. 5. Spikard, A.: The Common Cold, A Survey. Disease of the Chest 48:545-49. Nov. 1965. 6. Ibid. 7. Bourdial, J.:Role of Allergy in Upper Respiratory Tract Infection. Europa Med. Paris 4:75-80 1965. 8. Holmes, et al. The Nose p. 22. 9. Ibid. p. 320. 10. Proetz, A. W. op. cit. p. 321. 11. Ibid. p. 320. 12. Rees, Linford J.: Physiogenic and Psychogenic Factors in Vasomotor Rhinitis. J. Psychosomatic Research 8:101 Sept. 1964. 13. Horesh, A. J.: Allergy and Infection. An Allergy 23:621-35 Dec. 1965.

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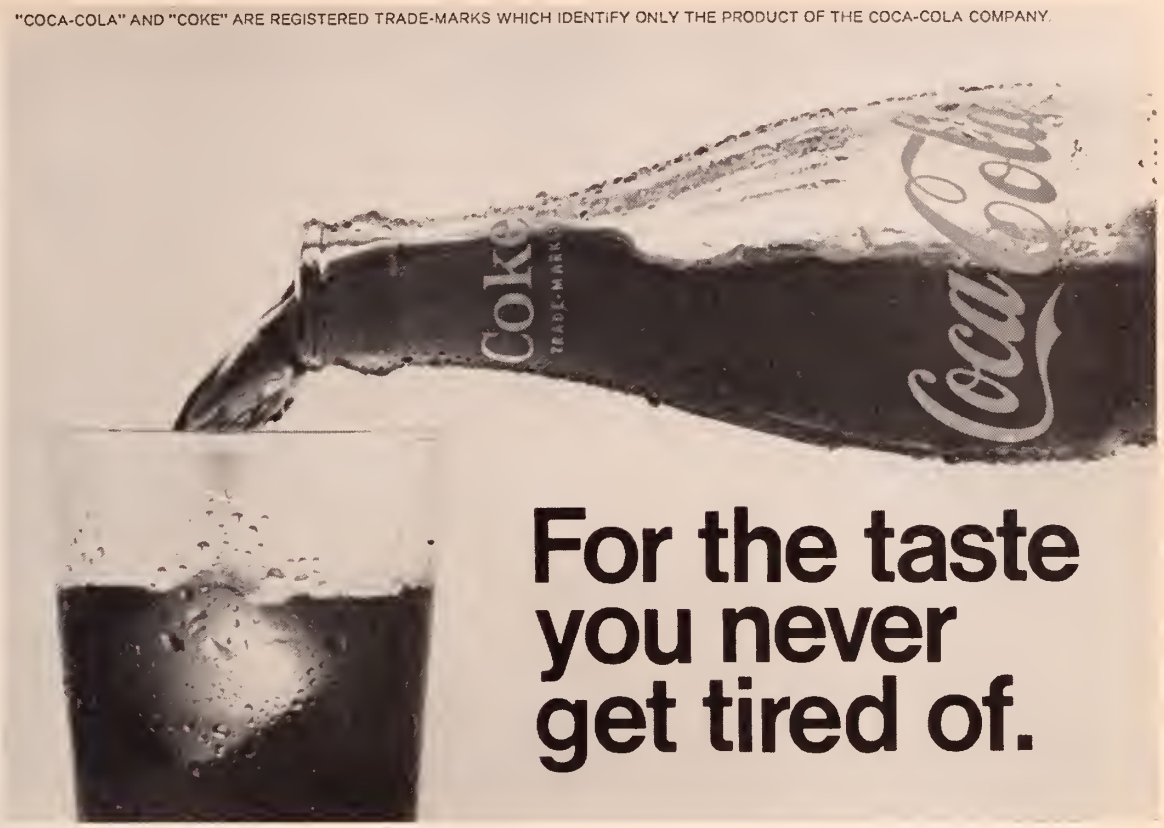
Each Tussagesic® timed-release tablet contains:

Triaminic® (phenylpropanolamine hydrochloride 25 mg.; pheniramine maleate 12.5 mg.; pyrilamine maleate 12.5 mg.)	50 mg.
Dextromethorphan hydrobromide	30 mg.
Terpin hydrate	180 mg.
Acetaminophen	325 mg.

Side effects: Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. Precautions: Patient should not drive a car or operate dangerous machinery if drowsiness occurs. Except under professional care, do not give to patients under 12 yrs. or those who have persistent cough, high fever, heart or thyroid disease, hypertension or diabetes or use for more than 10 days.

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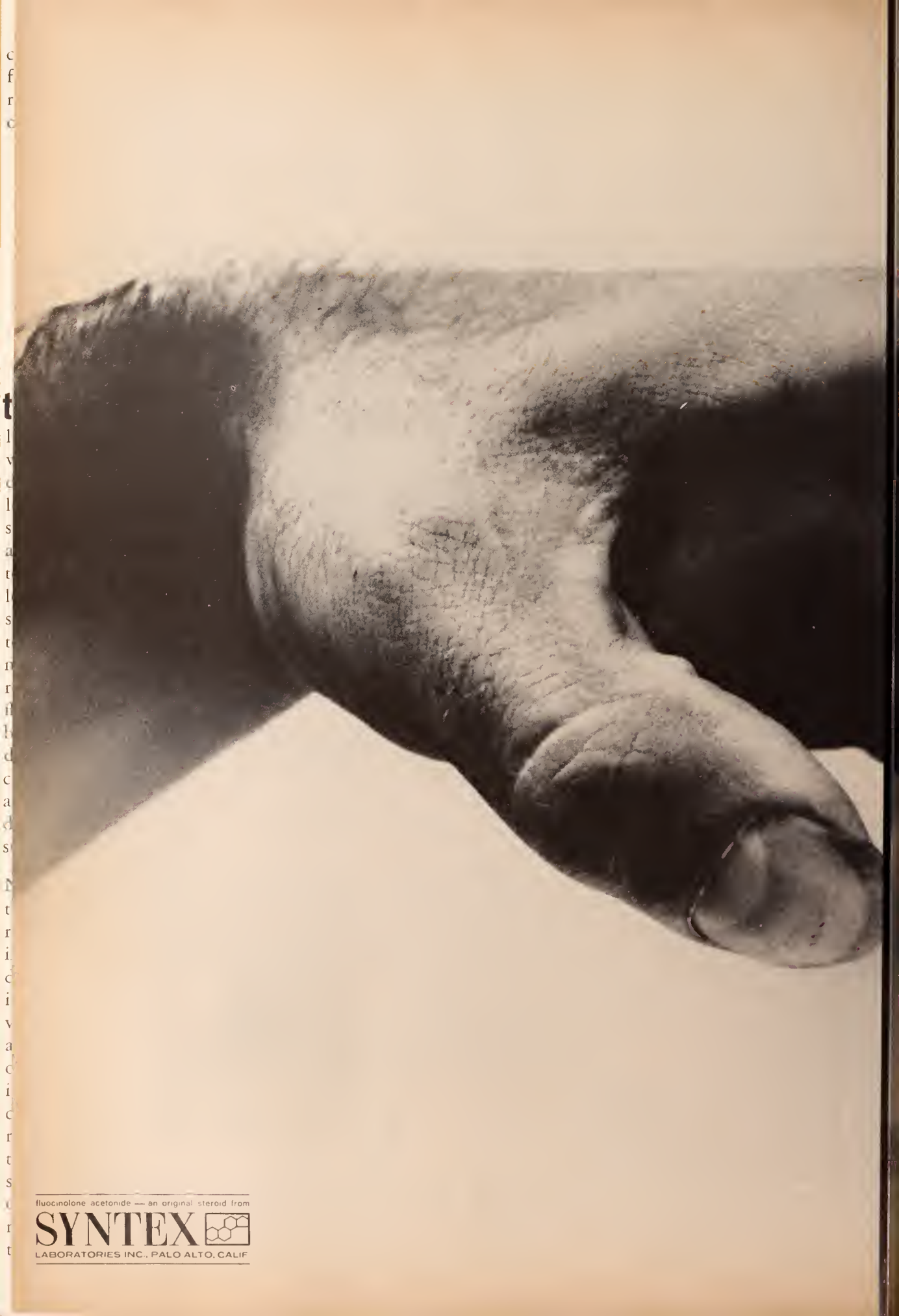
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References: 1. Pillsbury, D. M., Shelley, W. B., and Kligman, A. M.: A manual of cutaneous medicine, Philadelphia, Saunders, 1961, p. 79. **2.** Barber, M., and Garrod, L. P.: Antibiotic and chemotherapy, Baltimore, Williams and Wilkins, 1963, p. 111.



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Desbutal Gradumet contains 2 drugs, each in its own tablet section, combined back to back to form a single tablet. One section contains Desoxyn to suppress the appetite and lift the mood; the other contains Nembutal® (pentobarbital) to soothe the patient and counteract any excessive stimulation. The drugs are released in an effective dosage ratio throughout the day.

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The Gradumet is made up of thousands of interconnecting channels, much like a sponge. These channels—filled with a drug—end at the outer surface of the tablet. When fluid comes in contact with the Gradumet, the drug in the outer ends of the channels dissolves. As the fluid makes its way up the channels, there is a continuous release of medication.

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THE PROGRAM

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- Why you are overweight
- Rewards of weight reducing
- Balanced meals
- Helpful hints
- Hunger between meals
- Snacks
- Weekly weighings
- Exercise
- Holidays, vacations, special events
- Leanness and longevity

Each topic is covered on one page in simple and easy-to-understand language. At the back of the booklet, there is a list of 160 foods showing their caloric content.

FOOD DIARY



The Food Diary is designed to help the overweight patient follow your eating instructions. Space is provided for breakfast, lunch, supper, and even snacks. By writing everything down that's eaten each day, the patient is constantly reminded that she's trying to change her eating habits. And you are furnished with a written record of how well she's doing.

This booklet also lists the caloric content of 160 foods.

See Brief Summary on next page.

THE PRICE

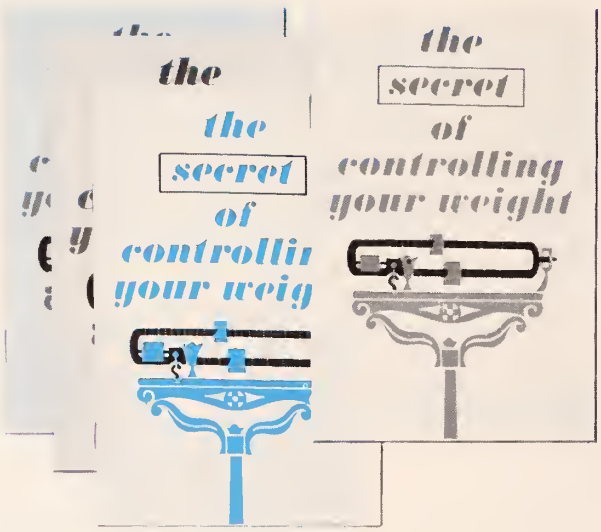
ECONOMY

S	M	T	W	T	F	S
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3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

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CONTRAINDICATIONS: Methamphetamine (in Desoxyn and Desbutal) is contraindicated in patients taking a monoamine oxidase inhibitor. Do not use pentobarbital (in Desbutal) in persons hypersensitive to barbiturates.

PRECAUTIONS, SIDE EFFECTS: Observe caution in patients with hypertension, cardiovascular disease, hyperthyroidism, old age, or those sensitive to sympathomimetic drugs. Prolonged usage may lead to tolerance or psychic dependence. Careful supervision is necessary to avoid chronic intoxication and addiction.

Amphetamine side effects such as a headache, excitement, agitation, palpitation or cardiac arrhythmia usually may be controlled by reducing the dose. Paradoxically-induced depression is an indication to withdraw the drug. Pentobarbital (in Desbutal) may cause skin rash. Nervousness or excessive sedation with Desbutal is usually transient.

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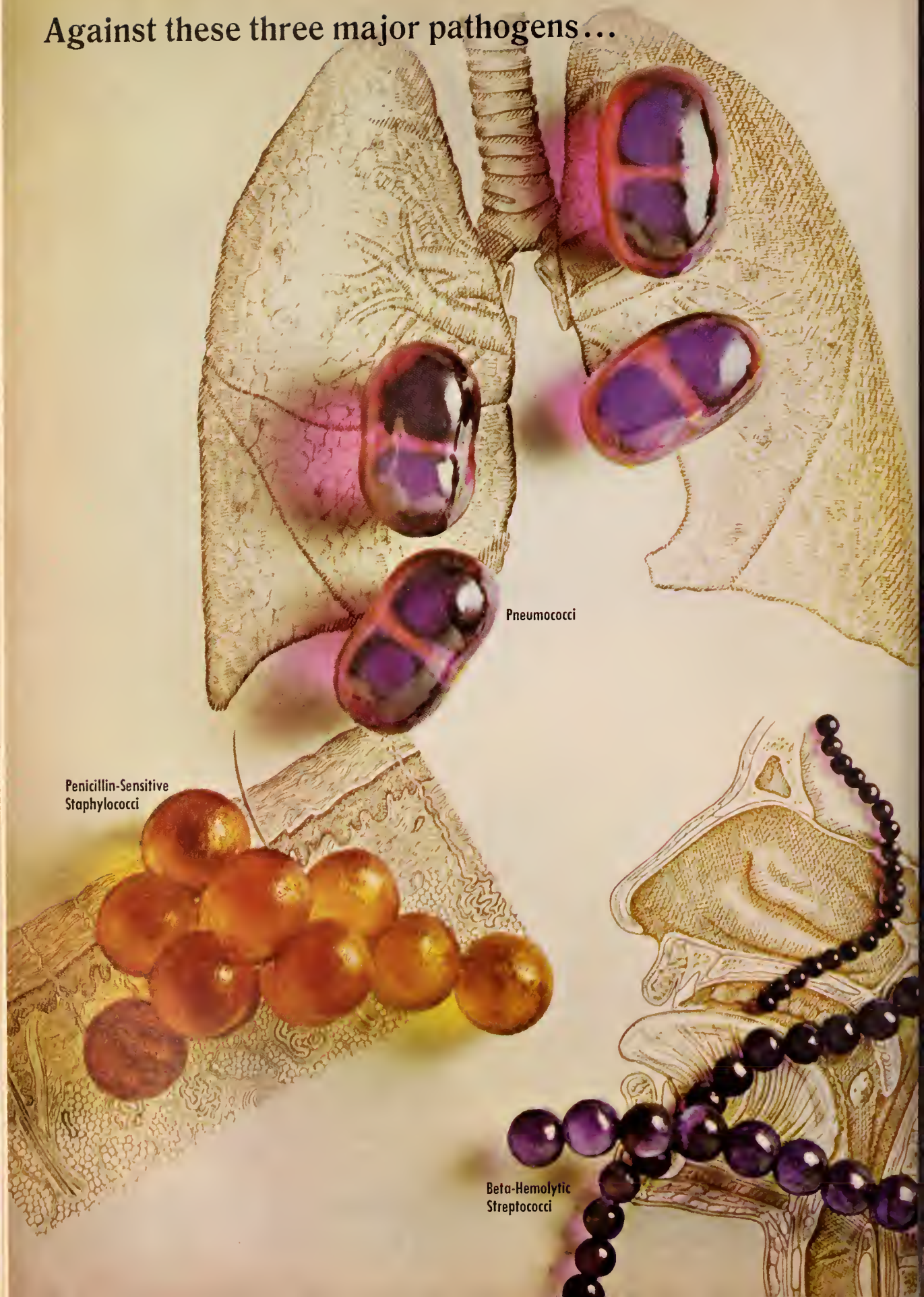
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PHARMACOLOGY: Triaminic decongests and promotes drainage of nasal and paranasal passages, and prevents any further histamine-induced damage; the triple sulfonamides inhibit susceptible bacterial invaders. INDICATIONS: For congestion and infection of the upper respiratory tract caused by sulfa-susceptible organisms. DOSAGE Adults: 2 to 4 tablets initially, followed by 2 tablets every 6 hours. Medication should be continued until patient has been afebrile for 3 days. ADVANTAGES: The advantages of Trisulfaminic in upper respiratory infections are: freedom from narcotics or alcohol; therapeutic reliability; safety; economy; ease of administration; freedom from potential sensitization to broad-spectrum antibiotics which may be reserved for lower respiratory or other infections caused by susceptible organisms. CONTRAINDICATIONS: Contraindicated in sulfonamide and antihistamine sensitivity, impaired renal function, pregnancy approaching term, and in premature infants and newborn infants during the first month of life. Do not use in patients with glaucoma, prostatic hypertrophy, stenosing peptic ulcer, pyloroduodenal or bladder neck obstruction. WARNING: Use only after careful evaluation in patients with liver or renal damage, urinary obstruction, or blood dyscrasias. Deaths have been reported from hypersensitivity reactions with administration of sulfonamides. In intermittent or prolonged therapy, blood counts and liver and kidney function tests should be performed periodically. Sulfonamide therapy may potentiate the hypoglycemic action of sulfonylureas. PRECAUTIONS: Use with caution in patients with histories of significant allergy or asthma. Assure an adequate fluid intake. Because the antihistamines may cause drowsiness of varying degree, warn patients about activities requiring alertness such as driving a car or operating dangerous machinery. Use with caution in the presence of hypertension, hyperthyroidism, cardiovascular disease and diabetes. ADVERSE REACTIONS: As in all sulfonamide therapy, the following reactions may occur: headache, nausea, vomiting, diarrhea, icterus, hepatitis, pancreatitis, urticaria, rash, fever, cyanosis, hematuria, crystalluria, proteinuria, blood dyscrasias, petechiae, purpura, neuropathy and injection of the conjunctiva and sclera. If one or more of these reactions occur, the drug should be discontinued. With antihistaminic therapy there have been reports of sedation varying from mild drowsiness to deep sleep, dizziness, lassitude, inability to concentrate, fatigue, incoordination, tinnitus, blurred vision, diplopia, euphoria, nervousness, insomnia, tremors, palpitation, hypotension, headache, chest tightness, urinary frequency, dysuria, tingling of the hands, dryness of the mouth, throat, and nose, gastrointestinal disturbances such as epigastric distress, anorexia, nausea, vomiting, constipation and diarrhea and very rarely, leukopenia and agranulocytosis. Adverse reactions reported with the use of sympathomimetic amines include anxiety, tension, restlessness, nervousness, tremor, weakness, insomnia, headache, palpitation, tachycardia, angina, elevation of blood pressure, sweating, mydriasis, anorexia, nausea, vomiting, dizziness, constipation, and dysuria due to vesicle sphincter spasm. PACKAGE INFORMATION. Trisulfaminic Tablets. Supplied in bottles of 100 tablets. CAUTION: Federal law prohibits dispensing without prescription.

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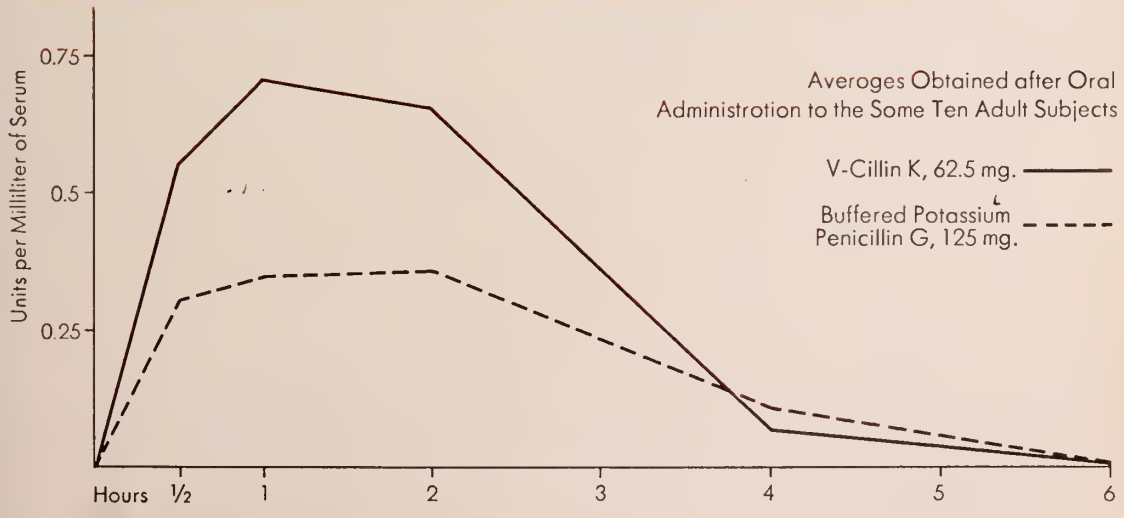
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Penicillin V	0.02	0.02-0.04	0.02	0.003-0.4	0.01	0.005-0.2
Penicillin G	0.02	0.005-1.6	0.005	0.002-0.2	0.02	0.01-0.1
Methicillin	1.6	0.4-6.3	0.2	0.1-0.4	0.2	0.1-1.6
Oxacillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Cloxacillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

Adapted from Klein, J. O., and Finland, M.. New England J. Med ,269 1019, 1963.

with high blood levels, even in the presence of food



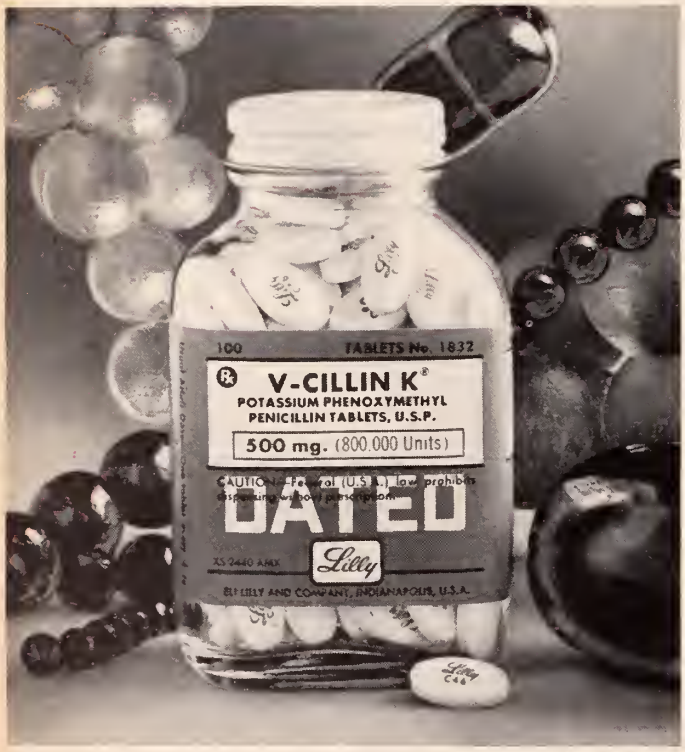
Adapted from Griffith, R. S., and Black, H. R · Current Ther. Res., 6 253, 1964.

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(See next page for prescribing informati

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V-Cillin K, Pediatric, is an oral solution of clinically proved V-Cillin K in teaspoon dosage form. When mixed as directed, each 5 cc. (approximately one teaspoonful) will contain 125 mg. (200,000 units) phenoxymethyl penicillin as the potassium salt.

Indications: V-Cillin K has been shown to be effective in the treatment of streptococcus, pneumococcus, and gonococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy and tooth extraction in those patients with a history of rheumatic fever or congenital heart disease.

Contraindication: V-Cillin K should not be administered to a patient with a history of penicillin hypersensitivity.

Precautions: V-Cillin K should be used cautiously, if at all, in a patient with a strongly positive history of allergy. Reactions occur more frequently in individuals with bronchial asthma or other allergies or in those who have previously demonstrated sensitivity to penicill hypersensitivity reactions occur, the drug should be discontinued

Adverse Reactions: Although serious allergic reactions are less common with administration of oral penicillin than with intram lar forms, skin rash, symptoms resembling those of serum sickne other manifestations of penicillin allergy may occur. When penicil administered, measures for treating anaphylaxis should be re available. Those include epinephrine, oxygen, and pressor drug relief of immediate allergic manifestations as well as antihista and corticosteroids for delayed effects.

The use of antimicrobial agents may be associated with the growth of antibiotic-resistant organisms; in such a case, antibiati ministration should be stopped and appropriate measures taken.

Administration and Dosage: For Tablets V-Cillin K and for V- K, Pediatric, the usual dosage ranges from 125 mg. (200,000 u three times a day to 500 mg. (800,000 units) every four hours. Fo fants, the daily dosage may be 50 mg. per Kg. of body weight di into three doses.

Beta-hemolytic streptococcus infections without associated b remia may be treated with 200,000 to 400,000 units three times a Therapy should be continued for a minimum of ten days to preven velopment of rheumatic fever and/or other serious complications. age for routine streptococcus prophylaxis in patients with a hista rheumatic fever or congenital heart disease may be 200,000 units or twice daily. When such patients undergo tonsillectomy, tooth ex tion, or other minor surgery, the prophylactic dose should be 500 units every six hours given two days prior to surgery and for two postoperatively. If oral medication is not feasible on the day of gery, parenteral therapy should be considered. Mild to moder severe pneumococcus pneumonia has been treated effectively 250 mg. every six hours.

In staphylococcus infections, 400,000 units or more should be g every six to eight hours in conjunction with indicated surgical p dures.

For gonorrhea in males, 500 mg. (800,000 units) every six hour three doses may be employed; in females, 500 mg. every four hour six doses are recommended. Patients with a suspected lesion of sy should have a dark-field examination before receiving penicillin monthly serologic tests for a minimum of three months.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units bottles of 50 and 100; 250 mg. (400,000 units), and 500 mg. (800 units) in bottles of 24 and 100.

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,000 units) 5 cc. of solution, in 40, 80, and 150-cc.-size packages.

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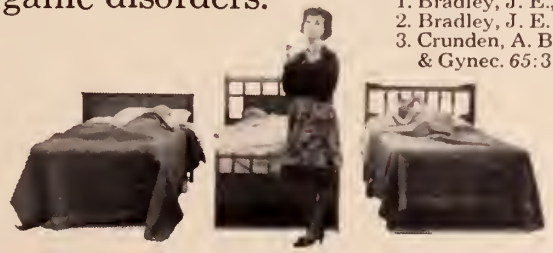
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1. Bradley, J. E., *et al.*: J. Pediat. *38*:41 (Jan.) 1951.
2. Bradley, J. E.: Mod. Med. *20*:71 (Oct. 15) 1952.
3. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. *65*:311 (Feb.) 1953.



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Equagesic®

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Precautions: Keep out of reach of children. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use of meprobamate may result in dependence or habituation in susceptible persons—as ex-addicts, alcoholics, severe psychoneurotics. Withdraw gradually after prolonged high dosage to avoid possibly severe withdrawal reactions including epileptiform seizures. Warn patients of possible reduced alcohol tolerance. If drowsiness, ataxia or visual disturbances occur, reduce dose. If symptoms persist, caution patients against operating machinery or driving. Give cautiously to patients with suicidal tendencies. Treat attempted suicide with immediate gastric lavage and appropriate supportive therapy

Side Effects: Ethoheptazine and aspirin may occasionally cause nausea, vomiting, epigastric distress, and rarely dizziness and CNS depression. Overdosage may result in salicylate intoxication. Meprobamate rarely causes allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. Meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioedema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. A few cases of leukopenia, usually transient, have been reported following prolonged dosage. Rarely, cases of aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis, and hemolytic anemia have been reported; almost always, in the presence of known toxic agents.

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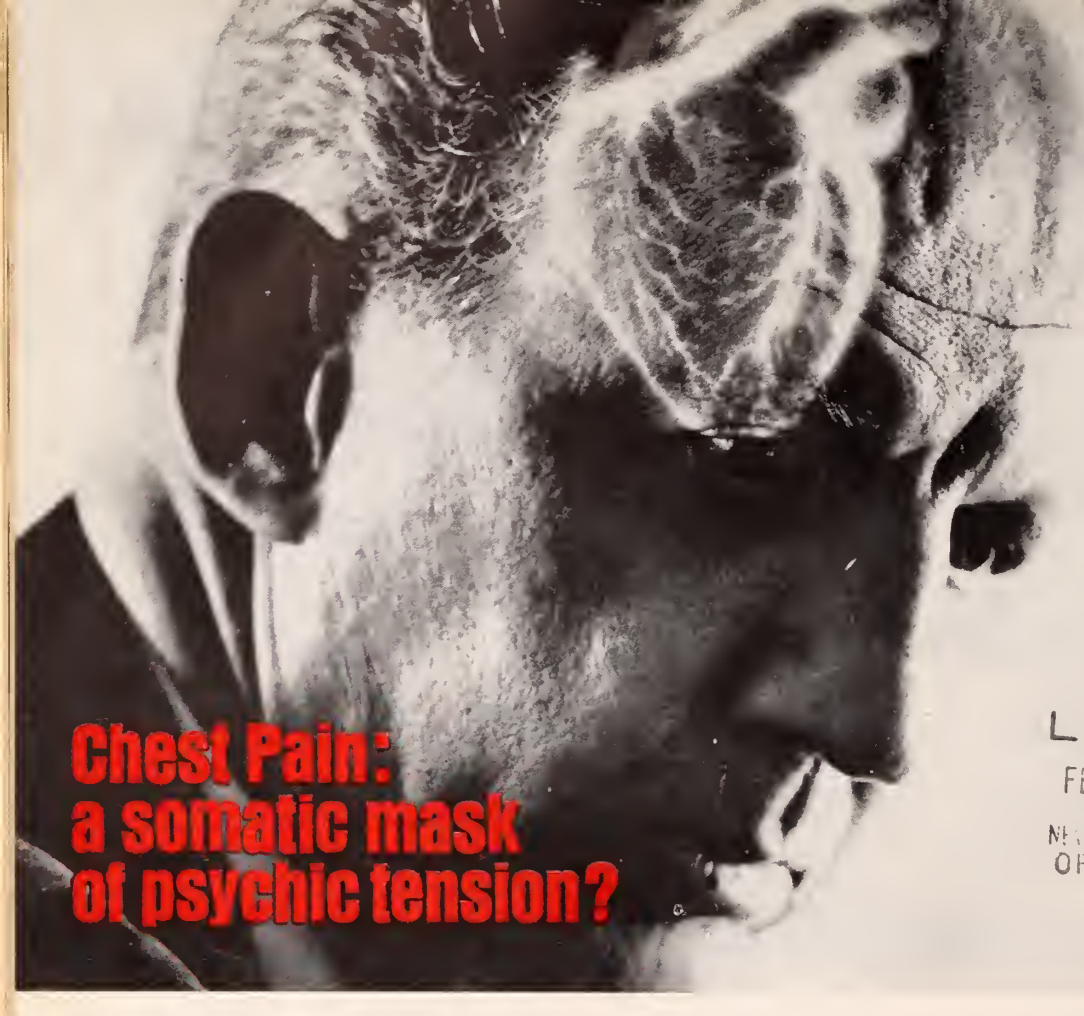
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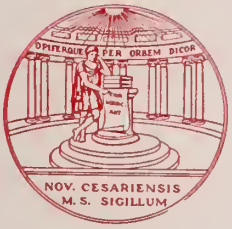
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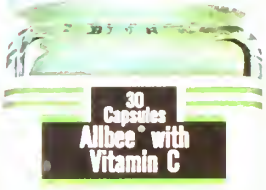
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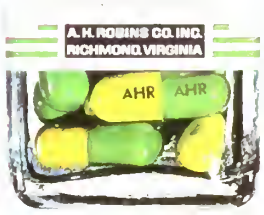
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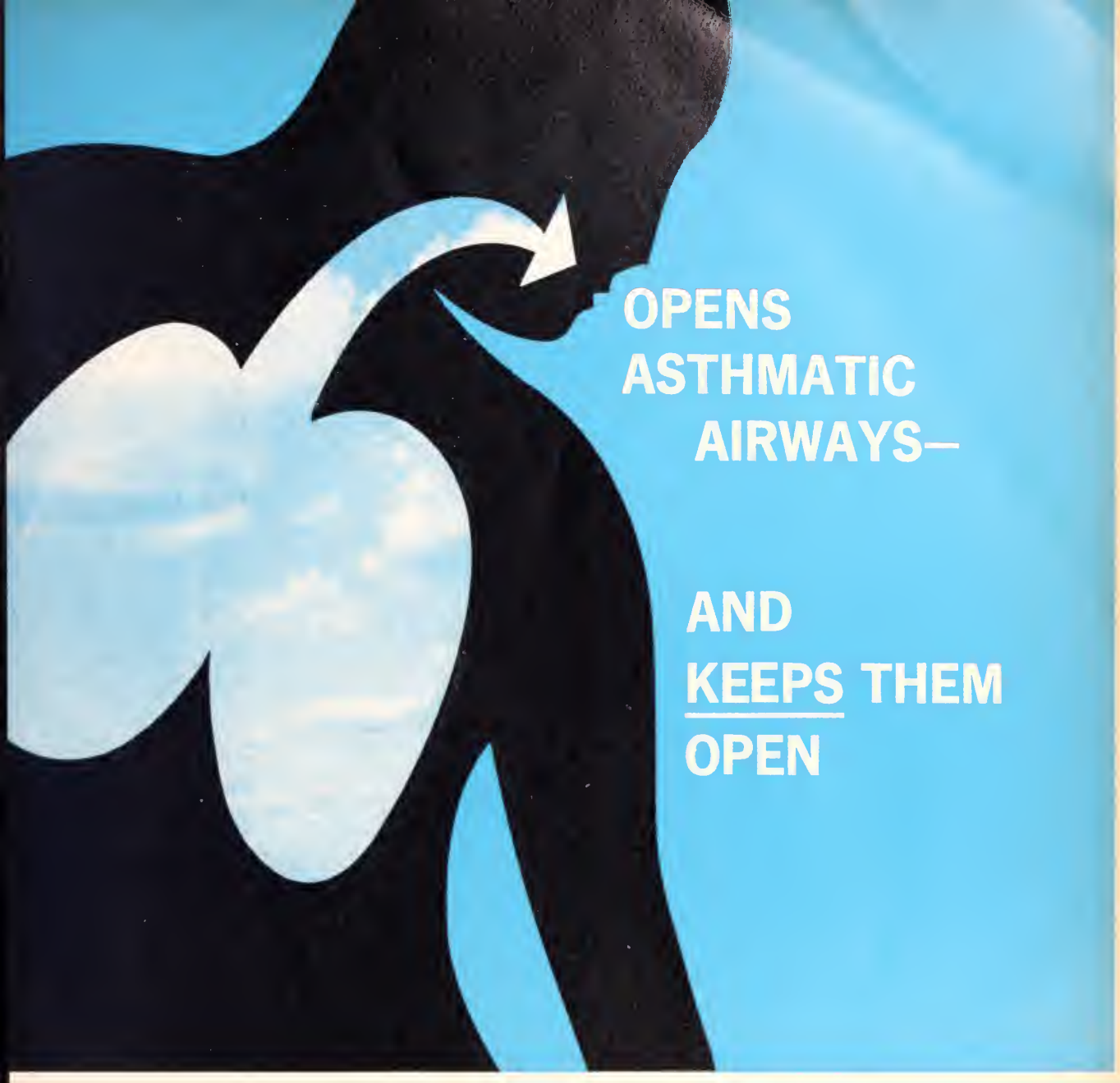
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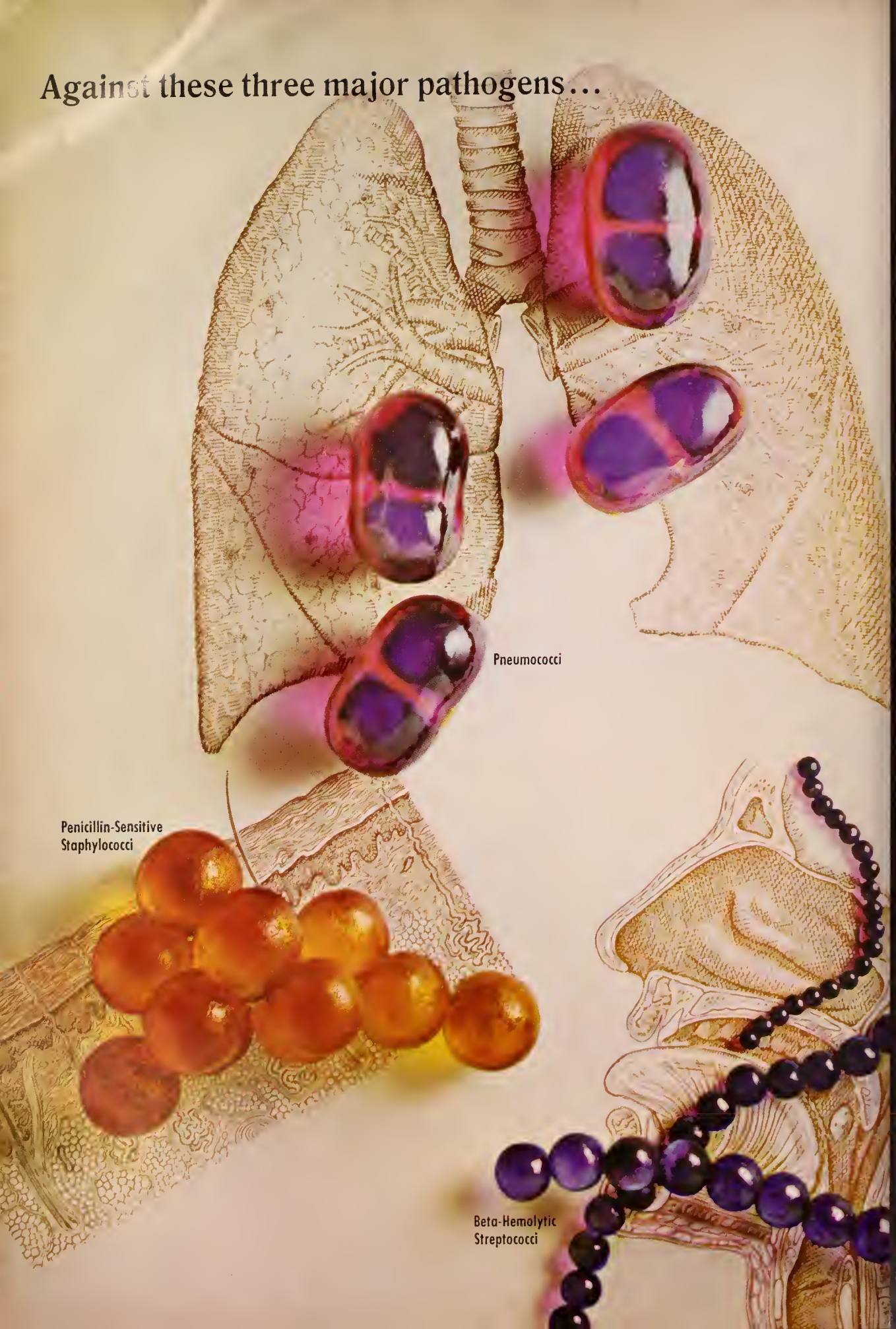
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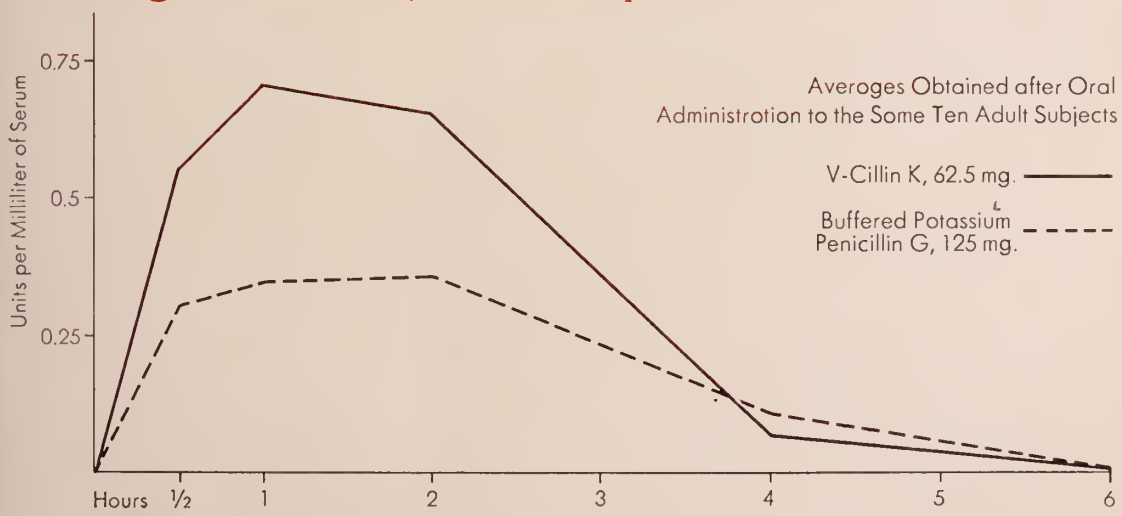
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because it combines a high degree of in-vitro activity...

Antibiotic	Staph. Aureus (Penicillin-Sensitive) MIC (mcg./ml.) Median	Range	Streptococcus, Group A MIC (mcg./ml.) Median	Range	Diplococcus Pneumoniae MIC (mcg./ml.) Median	Range
Penicillin V	0.02	0.02-0.04	0.02	0.003-0.4	0.01	0.005-0.2
Penicillin G	0.02	0.005-1.6	0.005	0.002-0.2	0.02	0.01-0.1
Methicillin	1.6	0.4-6.3	0.2	0.1-0.4	0.2	0.1-1.6
Oxacillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Cloxocillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

Adapted from Klein, J. O., and Finland, M. New England J Med., 269 1019, 1963.

with high blood levels, even in the presence of food



Adapted from Griffith, R. S., and Black, H. R Current Ther. Res., 6 253, 1964.

V-Cillin K® Lilly 700157

Potassium Phenoxymethyl Penicillin

(See next page for prescribing information

New 500 mg. tablets...a more convenient way to give high doses



Description: V-Cillin K is the potassium salt of V-Cillin® (phenoxymethyl penicillin, Lilly). This chemically improved form combines acid stability with immediate solubility and rapid absorption. Higher serum levels are obtained more rapidly with this penicillin than with equal oral doses of penicillin G. The higher serum levels and acid stability of V-Cillin K make it a more dependable penicillin for oral use.

V-Cillin K, Pediatric, is an oral solution of clinically proved V-Cillin K in teaspoon dosage form. When mixed as directed, each 5 cc. (approximately one teaspoonful) will contain 125 mg. (200,000 units) phenoxymethyl penicillin as the potassium salt.

Indications: V-Cillin K has been shown to be effective in the treatment of streptococcus, pneumococcus, and gonococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy and tooth extraction in those patients with a history of rheumatic fever or congenital heart disease.

Contraindication: V-Cillin K should not be administered to a patient with a history of penicillin hypersensitivity.

Precautions: V-Cillin K should be used cautiously, if at all, in a patient with a strongly positive history of allergy. Reactions occur more frequently in individuals with bronchial asthma or other allergies or in those who have previously demonstrated sensitivity to penicillin. If hypersensitivity reactions occur, the drug should be discontinued.

Adverse Reactions: Although serious allergic reactions are rare, they are less common with administration of oral penicillin than with intramuscular forms, skin rash, symptoms resembling those of serum sickness and other manifestations of penicillin allergy may occur. When penicillin is administered, measures for treating anaphylaxis should be readily available. Those include epinephrine, oxygen, and pressor drugs for relief of immediate allergic manifestations as well as antihistamines and corticosteroids for delayed effects.

The use of antimicrobial agents may be associated with the overgrowth of antibiotic-resistant organisms; in such a case, antibiotic administration should be stopped and appropriate measures taken.

Administration and Dosage: For Tablets V-Cillin K and for V-Cillin K, Pediatric, the usual dosage ranges from 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, the daily dosage may be 50 mg. per Kg. of body weight divided into three doses.

Beta-hemolytic streptococcus infections without associated bacteremia may be treated with 200,000 to 400,000 units three times a day. Therapy should be continued for a minimum of ten days to prevent development of rheumatic fever and/or other serious complications. The dosage for routine streptococcus prophylaxis in patients with a history of rheumatic fever or congenital heart disease may be 200,000 units two times or twice daily. When such patients undergo tonsillectomy, tooth extraction, or other minor surgery, the prophylactic dose should be 500,000 units every six hours given two days prior to surgery and for two days postoperatively. If oral medication is not feasible on the day of surgery, parenteral therapy should be considered. Mild to moderately severe pneumococcus pneumonia has been treated effectively with 250 mg. every six hours.

In staphylococcus infections, 400,000 units or more should be given every six to eight hours in conjunction with indicated surgical procedures.

For gonorrhea in males, 500 mg. (800,000 units) every six hours for three doses may be employed, in females, 500 mg. every four hours for six doses are recommended. Patients with a suspected lesion of syphilis should have a dark-field examination before receiving penicillin and monthly serologic tests for a minimum of three months.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units) in bottles of 50 and 100; 250 mg. (400,000 units), and 500 mg. (800,000 units) in bottles of 24 and 100.

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,000 units) per 5 cc. of solution, in 40, 80, and 150-cc.-size packages.

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

DOCTOR,

Here is the expanded Abbott anorectic program designed to meet the individual needs of your overweight patients.



THE PRODUCT

ABBOTT
ANORECTIC
PROGRAM

DESOXYN® Gradumet®
METHAMPHETAMINE HYDROCHLORIDE IN LONG-RELEASE DOSE FORM

5 mg. 10 mg. 15 mg.

DESBUTAL® 10 Gradumet
10 mg. METHAMPHETAMINE HYDROCHLORIDE, 60 mg. SODIUM PENTOBARBITAL

FRONT SIDE

DESBUTAL 15 Gradumet
15 mg. METHAMPHETAMINE HYDROCHLORIDE, 90 mg. SODIUM PENTOBARBITAL

FRONT SIDE

MOOD ELEVATION

DESOXYN Gradumet

Smooth appetite control plus mood elevation

Typically, the obese patient is a repeat dieter. And with each failure, the task looks more hopeless. Therefore, it is often just as important to lift the mood as to curb the appetite. Desoxyn Gradumet does just that. It gently elevates and sustains the mood. And no other product—amphetamine or non-amphetamine—is more effective in suppressing appetite.

DESBUTAL Gradumet

For patients who can't take plain amphetamine

Desbutal Gradumet contains 2 drugs, each in its own tablet section, combined back to back to form a single tablet. One section contains Desoxyn to suppress the appetite and lift the mood; the other contains Nembutal® (pentobarbital) to soothe the patient and counteract any excessive stimulation. The drugs are released in an effective dosage ratio throughout the day.

CONTROLLED-RELEASE

HOW IT DIFFERS FROM LONG-RELEASE

The Gradumet is made up of thousands of interconnecting channels, much like a sponge. These channels—filled with a drug—end at the outer surface of the tablet. When fluid comes in contact with the Gradumet, the drug in the outer ends of the channels dissolves. As the fluid makes its way up the channels, there is a continuous release of medication.

Since the rate of release is rigidly determined by the size and number of channels, the Gradumet is able to provide controlled-release as well as long-release. Patients get a measured amount of medication, moment by moment, throughout the day—from a single oral dose.



THIS IS A RELEASE YOU CAN COUNT ON

THE PROGRAM

WEIGHT CONTROL BOOKLET



To help your obese patients understand why they are overweight—and what they can do about it—Abbott has a booklet called "The Secret of Controlling Your Weight." *It is available to your patients only through you.*

Here is a partial list of the topics covered:

- Why you are overweight
- Rewards of weight reducing
- Balanced meals
- Helpful hints
- Hunger between meals
- Snacks
- Weekly weighings
- Exercise
- Holidays, vacations, special events
- Leanness and longevity

Each topic is covered on one page in simple and easy-to-understand language. At the back of the booklet, there is a list of 160 foods showing their caloric content.

FOOD DIARY



The Food Diary is designed to help the overweight patient follow your eating instructions. Space is provided for breakfast, lunch, supper, and even snacks. By writing everything down that's eaten each day, the patient is constantly reminded that she's trying to change her eating habits. And you are furnished with a written record of how well she's doing.

This booklet also lists the caloric content of 160 foods.

See Brief Summary on next page.

THE PRICE

ABBOTT
ANORECTIC
PROGRAM

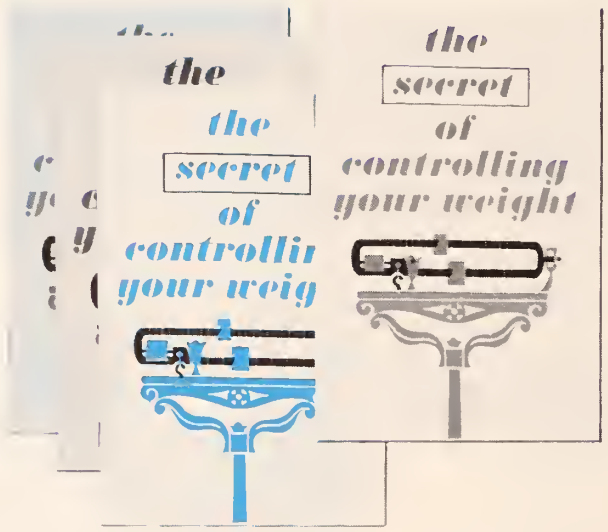
ECONOMY

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Desoxyn Gradumet and Desbutal Gradumet are so reasonably priced that patients in many cases save enough (compared to other leading long-release anoretics) to get five weeks of medication for the price of four.

FREE SUPPLIES





There are four weight control booklets, each with the same text, but with a different sample in the back of the booklet to meet your individual patient's needs. You have your choice of Desoxyn Gradumet in 10 mg. or 15 mg. strengths as well as Desbutal 10 Gradumet and Desbutal 15 Gradumet. The Food Diary is the same for all of the weight control booklets.

Your Abbott man will be happy to supply you with booklets. Just ask him.

CONTRAINDICATIONS: Methamphetamine (in Desoxyn and Desbutal) is contraindicated in patients taking a monoamine oxidase inhibitor. Do not use pentobarbital (in Desbutal) in persons hypersensitive to barbiturates.

PRECAUTIONS, SIDE EFFECTS: Observe caution in patients with hypertension, cardiovascular disease, hyperthyroidism, old age, or those sensitive to sympathomimetic drugs. Prolonged usage may lead to tolerance or psychic dependence. Careful supervision is necessary to avoid chronic intoxication and addiction.

Amphetamine side effects such as a headache, excitement, agitation, palpitation or cardiac arrhythmia usually may be controlled by reducing the dose. Paradoxically-induced depression is an indication to withdraw the drug. Pentobarbital (in Desbutal) may cause skin rash. Nervousness or excessive sedation with Desbutal is usually transient.

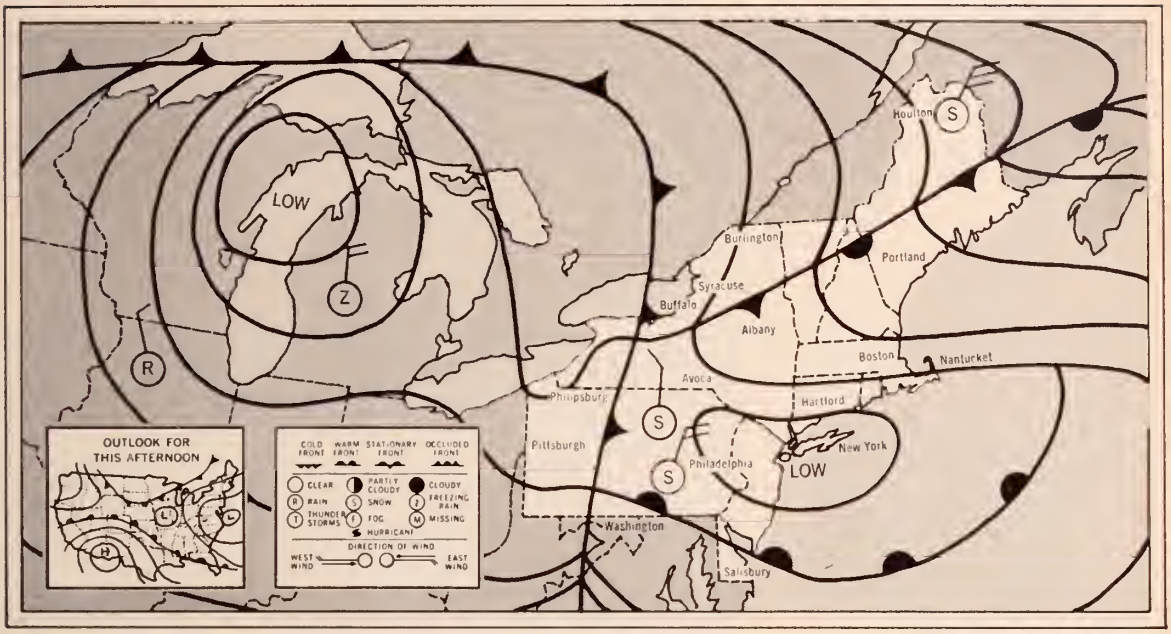
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ABBOTT

Gradumet—Long-release dose form, Abbott: U.S. Pat. No. 2,987,445.

REGIONAL WEATHER FORECAST

High Winds, Snow Storms and Much Colder Followed by Cough, Stuffed and Runny Noses and Aches and Pains.



Tussagesic breaks up coughs, quickly clears stuffed and runny noses and relieves aches and pains. Provide coverage of the tough cold for up to 24 hours with just a single timed-release tablet dosed morning, midafternoon and at bedtime.

each

Tussagesic®

timed-release tablet contains:

Triaminic® (phenylpropanolamine hydrochloride 25 mg., pheniramine maleate 12.5 mg., pyrilamine maleate 12.5 mg.)	50 mg.
Dextromethorphan hydrobromide	30 mg.
Terpin hydrate	180 mg.
Acetaminophen	325 mg.

Dosage: Adults—1 tablet, swallowed whole to preserve timed-release feature, in morning, midafternoon and at bedtime. *Side effects:* Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. *Precautions:* The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

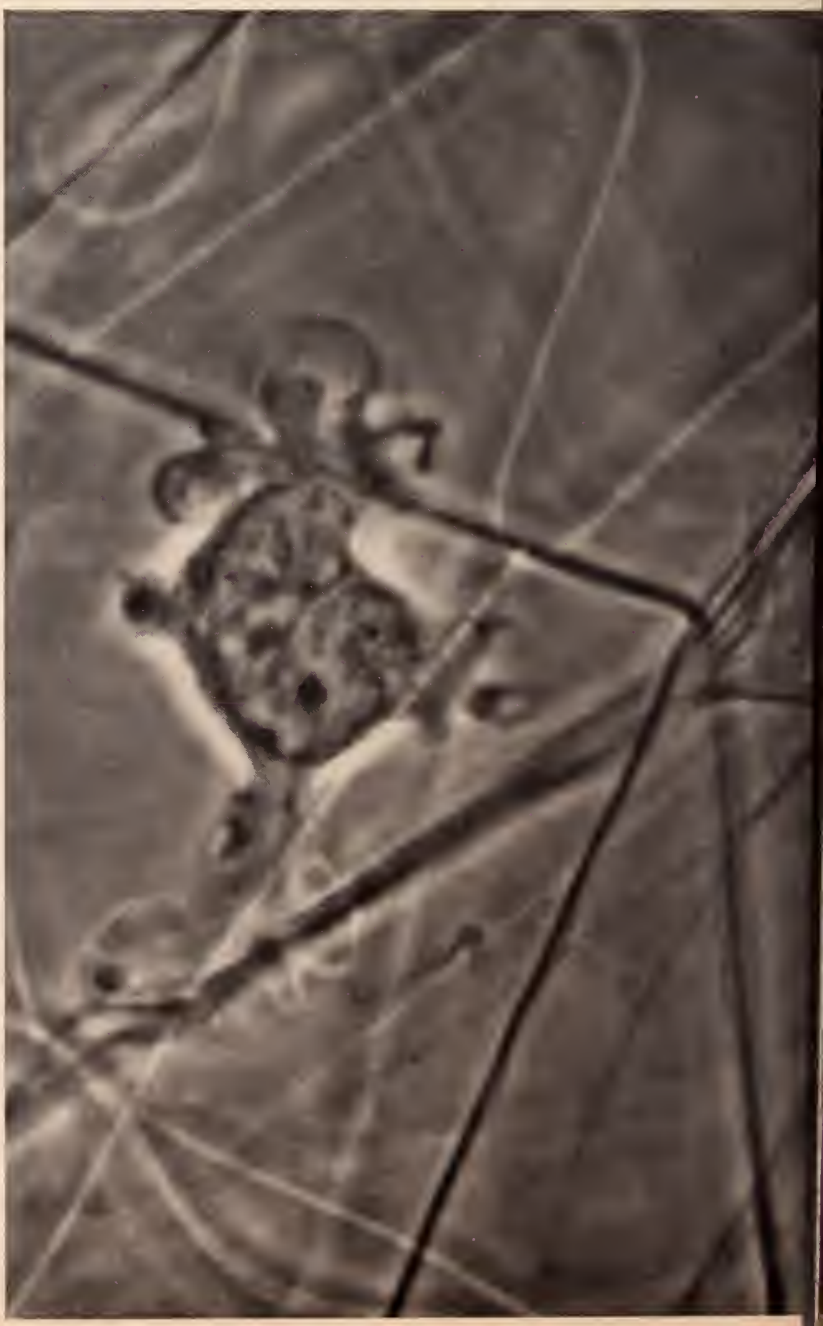
DORSEY LABORATORIES • *a division of The Wander Company* • **LINCOLN, NEBRASKA**

INFLAMMATION:
A cellular fight for life

A SYNTEX REPORT based on recently developed hypotheses about topical corticosteroids, including the cellular theories of inflammation by Thomas F. Dougherty, Ph.D., University of Utah.

You are looking at a fibroblast fighting for life. This cell—one of the most common found in connective tissue—has literally been poisoned by cytotoxins released from other cells that have ruptured. Soon, if the abnormal activity of this fibroblast does not cease, it, too, will rupture and die—one more casualty in the inflammatory wave of destruction precipitated by injury.

Until a short time ago no one had ever witnessed such a scene at the cellular level. Now, through advanced cinemicrographic techniques, it is possible to view and photograph the inflammatory process as produced experimentally in living animal tissue. This method permits new insight into the mechanism of inflammation and the role of corticosteroids in therapeutic management. Equally important, these techniques shed new light on factors that may make one corticosteroid more effective than another—factors that can be correlated with other chemical, biologic, and clinical parameters.

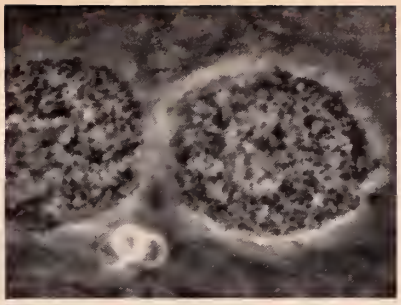


Visual evidence of how corticosteroids influence the inflammatory reaction

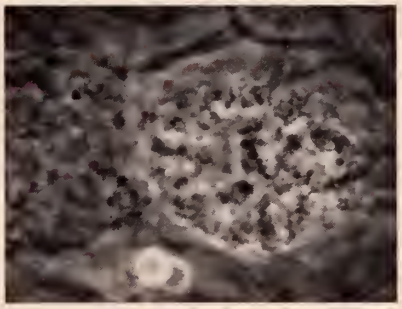
Working with phase-contrast cinemicrography on living animal tissue, Doctors Thomas F. Dougherty and David Berliner of the University of Utah College of Medicine have actually filmed cellular events that occur during the inflammatory reaction. This remarkable study* and additional work by these investigators, as well as by others, have established a new theoretical biologic basis for the antiinflammatory effect of the corticosteroids. (It must be noted that other theories, such as the lysosome or so-called "suicide bag" theory, have been postulated, although it is quite likely that there are more similarities than differences among the various theoretical models.)

The inflammatory wave of destruction

In this investigation an injurious injection of gelatin is used to set off an inflammatory reaction in living mouse tissue. What follows is a wave of destructive cellular activity that comprises the inflammatory response to injury. Mast cells (which contain heparin, serotonin and histamine) take up water, swell and rupture, releasing their contents, which are toxic outside the mast cell wall. These toxins, in turn, cause disintegration of other cells (such as fibroblasts) and the release of additional toxic material. Capillaries, too, take up water and leak unformed blood elements, causing edema. And polymorphonuclears, lymphocytes and epithelial cells invade the inflamed site. As a result of all these changes, the cellular environment reaches a state of turmoil.



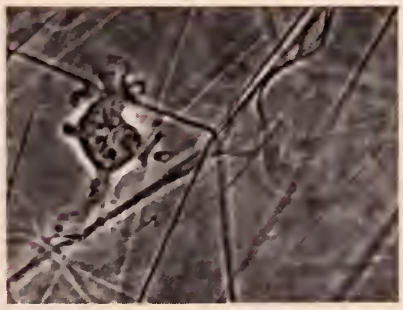
Phase-contrast microscopy showing mast cell before injury.



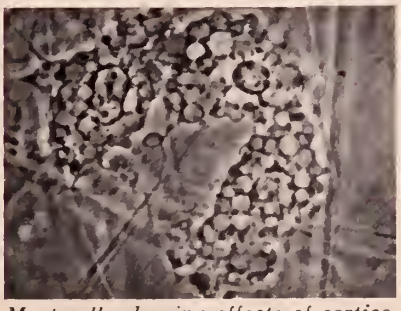
Mast cell (after injury) has broken up and released cytotoxins.

How corticosteroids change the picture

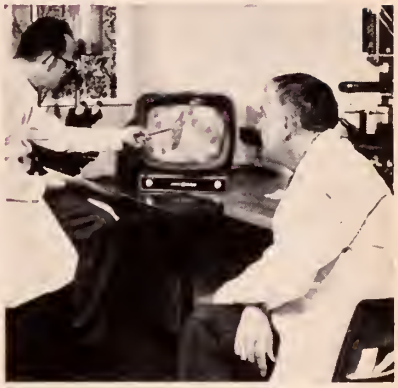
Corticosteroids appear to virtually stop the abnormal cellular activity that constitutes the inflammatory reaction. This permits the body's natural resources to clear up the inflamed area and repair the damaged tissue. This interpretation is supported by the fact that when the injurious gelatin solution is injected simultaneously with a corticosteroid — Synalar (fluocinolone acetonide) — the inflammatory pattern simply does not develop.



Fibroblast in high state of activity, much distorted.



Mast cells showing effects of corticosteroid action: cells are normal in size, shape and activity.



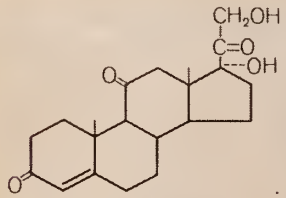
In summarizing his study Doctor Dougherty states: "...we also feel this work may explain why one corticosteroid helps a patient more rapidly and effectively than another. If it does, it is because one corticosteroid is the fastest, most effective inhibitor of the series of inflammatory events at the tissue level."

**A New View of Corticosteroid Action in Inflammatory Dermatoses,* a film based on this study, is now available from your Syntex representative.

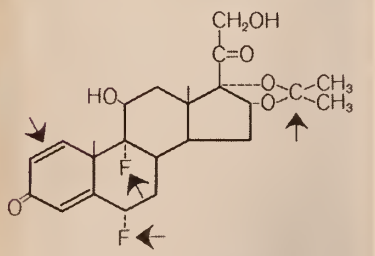
See last page for contraindications, precautions, side effects and dosage

How advances in chemical design have achieved greater steroid potency

The chemical modification of corticosteroid molecules from the advent of hydrocortisone to the development of Synalar (fluocinolone acetonide) is a prime example of how biochemists can "design" to increase therapeutic activity and minimize undesirable side actions. Below, for example, we see the important changes that were made in reference to the hydrocortisone molecule to produce fluocinolone acetonide, one of the most active of all topical corticosteroids. As a result, a 0.01% preparation of Synalar (fluocinolone acetonide) has been reported to do the work of a 1% hydrocortisone product containing 100 times more cortiscosteroid. And it can often do it more effectively.



Hydrocortisone



Fluocinolone Acetonide (Synalar)

- *a double bond between carbons 1 and 2*
- *fluorine substitutions at* both *the 6-α, and the 9-α positions*
- *the addition of the acetonide at the 16-α, 17-α positions, thus providing one of the most potent topical corticosteroids available.*

How bioassay tests are used to "predict" therapeutic potential

Biologic assays are another tool used by researchers to help establish the relative activity of corticosteroids. To date no single method of assaying corticosteroid activity has emerged as the ideal "yardstick" for predicting therapeutic potential. Taken together, however, these methods have proved useful. When such tests are run on various corticosteroids, a definite order of corticosteroid activity becomes evident. Compounds with the highest order of activity may be expected to merit clinical trial to establish their high therapeutic potential. When assayed by these methods, fluocinolone acetonide (Synalar) emerges as one of the most active topical corticosteroids, milligram for milligram, available for clinical application today.



THE THYMUS INVOLUTION ASSAY[1-4] is run on adrenalectomized rats. The sizes of the glands are measured, and the degree of involution caused by the steroid is determined as an indication of its potency. In the above photo, the comparative involution of thymus glands achieved with hydrocortisone and Synalar (fluocinolone acetonide) is shown. Untreated controls (A) show normal size. Group B – injected with 1, 2 and 4 mg. of hydrocortisone – show progressively smaller thymuses as does Group C – injected with fluocinolone acetonide – but with only 1/500th the dose of hydrocortisone.



THE ANTIGRANULOMA ASSAY[1-4] also utilizes adrenalectomized rats. Granulomas are induced by subcutaneous implantation of cotton pellets on either side of the thorax. The degree of granuloma inhibition achieved by a steroid reflects its potency. The above photo shows the inhibition of granuloma formation achieved with hydrocortisone and Synalar (fluocinolone acetonide). Untreated controls (A) show large, red granulomas adhering to the pellets. Group B, receiving hydrocortisone and Group C, receiving fluocinolone acetonide, show little, if any, granuloma formation. Fluocinolone acetonide produced the same effect as hydrocortisone with only 1/500th the dose. This assay, as well as the thymus involution assay, measures systemic rather than topical corticosteroid activity. Nevertheless, results by these methods correlate well with other assays and with the milligram potencies of topical steroids in current clinical use.

Worldwide clinical experience confirms the predictable therapeutic potential of Synalar

It is particularly gratifying that the promise of the advanced chemical design and high order of bioassay activity of Synalar (fluocinolone acetonide) has been confirmed by widespread therapeutic application. Indeed, the impressive clinical response rate of Synalar has been documented in no fewer than 232 papers from 22 countries.

Representative Clinical Results with Synalar*

Efficacy Documented in over 4,000 Patients

Condition	Number of Publications	Number of Patients	Significant Improvement†
Contact Dermatitis	27	750	713
Eczematous Dermatitis	21	472	409
Seborrheic Dermatitis	18	442	426
Atopic Dermatitis	24	460	426
Psoriasis	36	1,699	1,510
Neurodermatitis	18	351	324
Total	144	4,174	3,808

*Complete bibliography on request.

†Expressed by the authors as excellent, very good, good, complete remission of inflammation, etc.

PRESCRIBING INFORMATION

For initiation of therapy: Cream 0.025%, 5 and 15 Gm. tubes, 425 Gm. jars; *for emollient effect:* Ointment 0.025%, 15 Gm. tubes; *for maintenance therapy:* Cream 0.01%, 15 and 45 Gm. tubes, 120 Gm. jars; *for intertriginous or hairy sites:* Solution 0.01%, 20 cc. and 60 cc. plastic squeeze bottles; *for infected inflammatory dermatoses:* Neo-Synalar® Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes. CONTRAINDICATIONS: Tuberculous, fungal, and most viral lesions of the skin, (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. PRECAUTIONS: Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. While topical steroids have not been reported to have an adverse effect in pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. When severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. SIDE EFFECTS: Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. The neomycin in Neo-Synalar Cream rarely produces allergic reactions.

REFERENCES: 1. Lerner, L. J., Bianchi, A., Turkheimer, A. R., Singer, F. M., and Borman, A.: Anti-inflammatory steroids: potency, duration and modification of activities. Ann NY Acad Sci 116:1071 (Aug. 27) 1964. 2. Idem: Comparison of anti-granuloma, thymolytic and glucocorticoid activities of anti-inflammatory steroids. Proc Soc Exp Biol Med 116:385 (June) 1964. 3. Ringler, A.: Activities of adrenocorticosteroids in experimental animals and man, in Dorfman, R. I.: Methods of hormone research, New York, Academic Press, 1964. vol. III. pp. 234-280. 4. Gubersky, V. R.: To be published.

fluocinolone acetonide — an original steroid from

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For inflammatory dermatoses... by any measure a topical corticosteroid of choice

Synalar® (fluocinolone acetonide)

Milligram for milligram one of the most active topical corticosteroids available

Rapid and predictable in antiinflammatory and antipruritic activity

Results often comparable to those of systemic corticosteroids with fewer hazards

IMPORTANT FACTS

about

Professional Liability Coverage

Insurance that only covers claims based on the rendering of, or failure to render, professional services, or arising out of malpractice error or mistake in rendering professional services, is no longer adequate.

Our policy, approved and recommended by The Medical Society of New Jersey is broad enough to cover:

(1) the non-negligent as well as the negligent claim, such as arising out of duties as committee member in your society or hospital.

(2) The financial loss to a physician in attending trial as a defendant in protracted litigation.

(3) punitive damages for libel or slander.

This program, which was designed with The Medical Society of New Jersey and its legal counsel, and operated by a cooperative Loss Control Program, offers this broad protection, security and continuity of coverage.

Complete protection should not
be controlled by price.

AMERICAN MUTUAL LIABILITY INSURANCE COMPANY

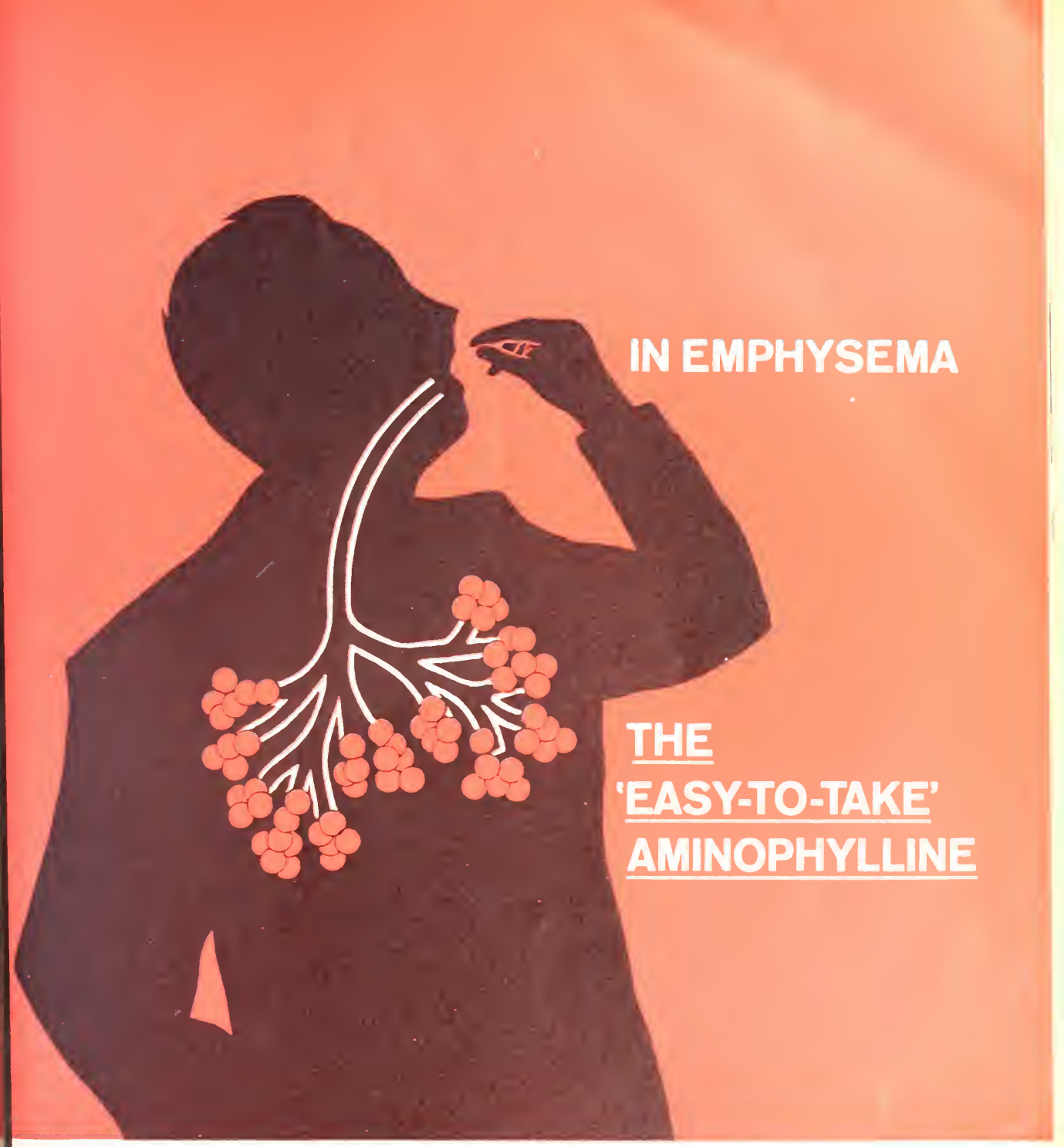
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IN EMPHYSEMA

THE 'EASY-TO-TAKE' AMINOPHYLLINE

Aminophylline dura-tabs

prolonged-medication tablets 4½ gr (0.3 Gm)

Precautions Use with caution in patients with poor renal function as a decreased rate of excretion may lead to accumulation and untoward reactions. Gastric irritation may occasionally be observed in certain patients sensitive to oral aminophylline.

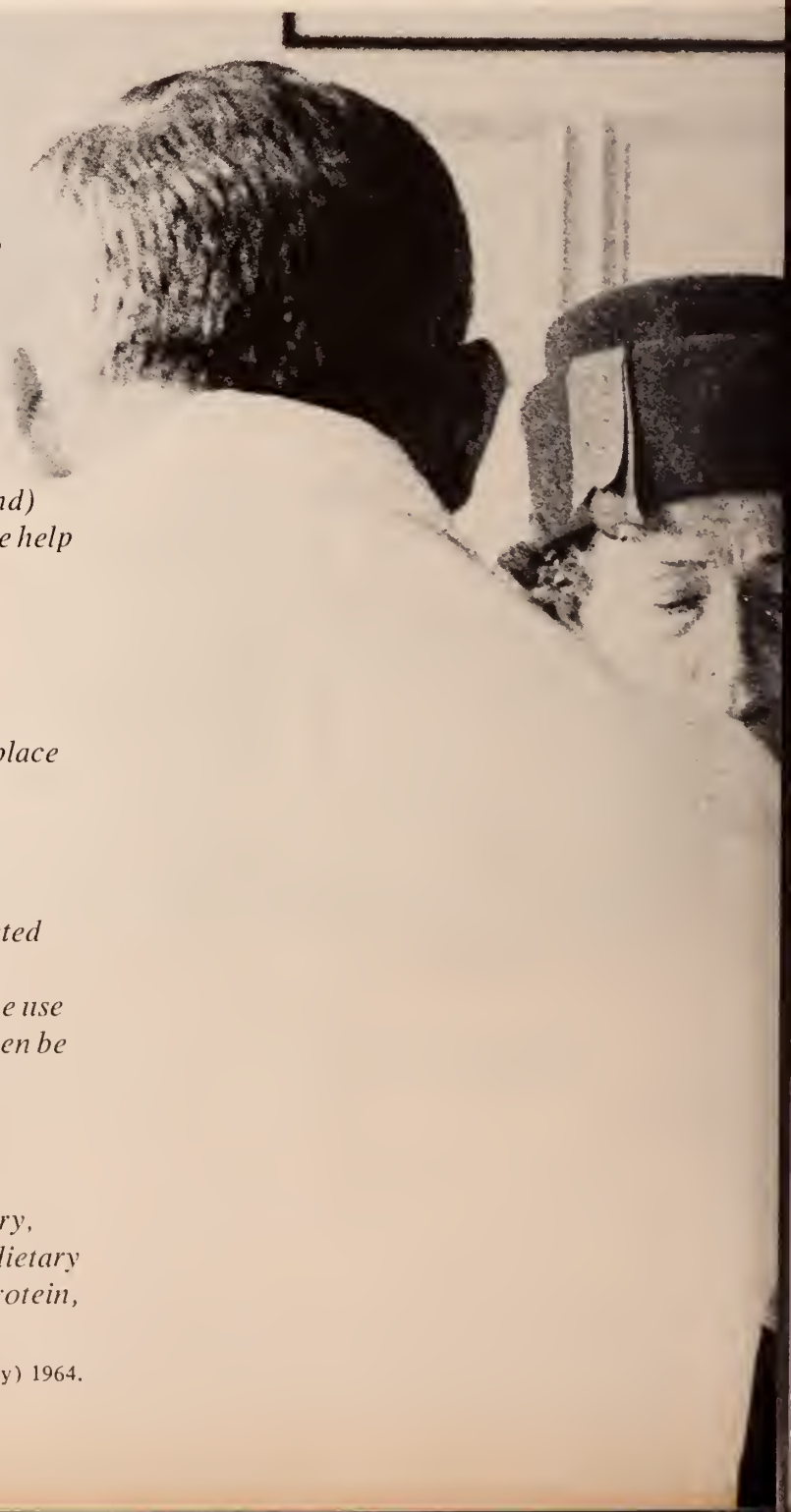
Dosage Adults 1 to 2 Aminophylline Dura-Tabs each 8 or 12 hours with food.

RARELY UPSET THE STOMACH

Oral aminophylline needn't disturb the stomach—nor a good night's sleep. Patients breathe easier all day, sleep better all night, as each Aminophylline Dura-Tab dose provides effective therapeutic activity for up to 12 hours. And unlike conventional tablets, AMINOPHYLLINE DURA-TABS seldom cause gastric distress. The special Dura-Tab process allows the gradual absorption of the medication from the intestinal tract with only a small fraction of the dose released in the stomach.

WYNN Pharmaceuticals, Inc., Phila., Pa. 19132 • Manufacturers of QUINAGLUTE, DURA-TABS

The Mediatric Age:
There is a growing senescent body of people on their way to malignant inactivity, who sorely need your interest and direction to help them back to a more active and useful life. There are medicines too, designed to help. One such has proved useful in clinical practice.



"A steroid-nutritional compound (Mediatric) was used in 100 patients to relieve some of the symptoms caused by degenerative changes of aging . . . This therapy resulted in improvement of 75 per cent of the patients . . ."

McNeill, A. J.: Clin. Med. *8*:518 (Mar.) 1961.

"Mediatric (steroid-nutritional compound) capsules, one a day, seem to give definite help to debilitated patients."

Arnold, E. T., Jr.: Geriatrics *12*:612 (Oct.) 1957.

"Nutritional and hormone bolstering of function in the aged may have a useful place in geriatrics."

Morgan, A. F.: Gerontologist *2*:77 (June) 1962.

"In diets which for any reason are restricted in calories, enough of these substances (B vitamins) may not be supplied . . . The use of B and C vitamin supplements may then be justified and indeed may be necessary."

Morgan, A. F.: Gerontologist *2*:77 (June) 1962.

"Intensive nutritional therapy is necessary, especially in elderly people, to correct dietary deficiencies created by large losses of protein, vitamins and other nutrients."

Riccitelli, M. L.: J. Am. Geriatrics Soc. *12*:489 (May) 1964.

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Contains 15% alcohol

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MEDIATRIC helps keep the older patient alert and active; helps relieve general malaise, easy fatigability, vague pains in the bones and joints, loss of appetite, and lack of interest usually associated with declining gonadal hormone secretion.

CONTRAINDICATION: Carcinoma of the prostate, due to methyltestosterone component.

WARNING: Some patients with pernicious anemia may not respond to treatment with the Tablets or Capsules, nor is cessation of response predictable. Periodic examinations and laboratory studies of pernicious anemia patients are essential and recommended.

SIDE EFFECTS: In addition to withdrawal bleeding, breast tenderness or hirsutism may occur.

SUGGESTED DOSAGES: *Male and female:* 3 teaspoonfuls of Liquid, 1 Tablet, or 1 Capsule, daily or as required.

In the female: To avoid continuous stimulation of breast and uterus, cyclic therapy is recommended (3 week regimen with 1 week rest period—Withdrawal bleeding may occur during this 1 week rest period).

In the male: A careful check should be made on the status of the prostate gland when therapy is given for protracted intervals.

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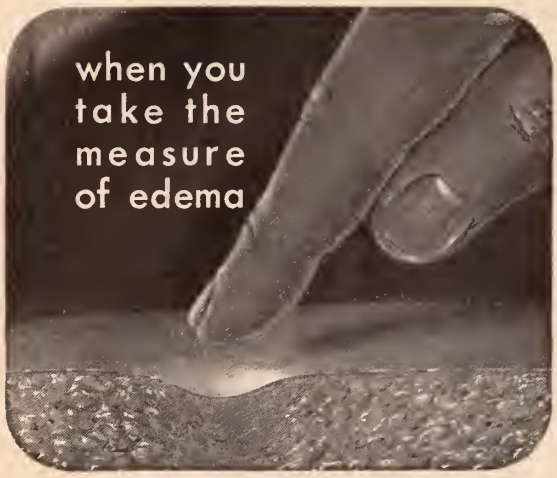
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AQUATAG (Benzthiazide) is a potent, orally active, nonmercurial, diuretic agent. It is effective orally in producing diuresis in edema states, where it is therapeutically comparable to mercurials given parenterally. AQUATAG (Benzthiazide) is mildly antihypertensive in its own right and enhances the action of other antihypertensive drugs when used in combination.

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DOSAGE: Diuresis, initially 50 to 200 mg., maintenance 25 to 150 mg., daily. Hypertension 50 to 100 mg. initially, adjusted to 50 mg. t.i.d. or downward to minimal effective dosage level.

WARNINGS: Use with caution in the presence of renal disease as azotemia may be precipitated or increased. In patients with advanced hepatic disease, electrolyte imbalance may result in hepatic coma. Dosage of coadministered antihypertensive agents should be reduced by at least 50%. In cases of suspected electrolyte imbalance, serum electrolyte determinations should be performed and imbalance, if any, corrected. Stenosis or ulcer of small intestine have been reported with coated potassium formulas, and surgery has been required and deaths have occurred. Based on surveys of both United States and foreign physicians, incidence of these lesions is low and a causal relationship in man has not been definitely established. Until further experience has been obtained, the use of the drug in pregnant patients should be weighed against possible hazards to the fetus.

CONTRAINDICATIONS: AQUATAG (benzthiazide) is contraindicated in progressive renal disease or dysfunction including increasing oliguria and azotemia. Continued administration of this drug is contraindicated in patients who show no response to its diuretic or antihypertensive properties. Severe hepatic disease is a relative contraindication. (See "Warnings" above.)

PRECAUTIONS AND SIDE EFFECTS: Electrolyte imbalance with hypokalemia (digitalis toxicity may be precipitated), hypochloremic alkalosis and hyponatremia may occur.

Patients with cirrhosis should be observed for impending hepatic coma and hypokalemia. Other reactions may include blood dyscrasias, hyperuricemia and gout, nausea, jaundice, anorexia, vomiting, diarrhea, dizziness, paresthesia, photosensitivity and headache. Hepatic letor, tremor, confusion and drowsiness are signs of impending pre coma and coma in patients with cirrhosis. Insulin requirements may be altered in diabetes. AQUATAG (benzthiazide) should be used with caution post-operatively as hypokalemia is not uncommon. Potassium supplementation may be advisable pre- and post-operatively. There have been occasional reports of thrombocytopenia, leukopenia, agranulocytosis, aplastic anemia and precipitation of acute pancreatitis or jaundice.

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Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should be closely supervised and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage. Make regular blood counts. Discontinue the drug and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The most common are nausea, edema and drug rash. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, or a generalized allergic reaction may occur and require withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Osteoarthritis: The initial daily dosage in adults is 300-600 mg. in divided daily doses. When improvement occurs, dosage should be decreased to the minimum effective level; this should not exceed 400 mg. daily, and is often achieved with only 100-200 mg. daily.

For complete details, please refer to full prescribing information. 6562-VI(B)R

Availability: Tablets of 100 mg.

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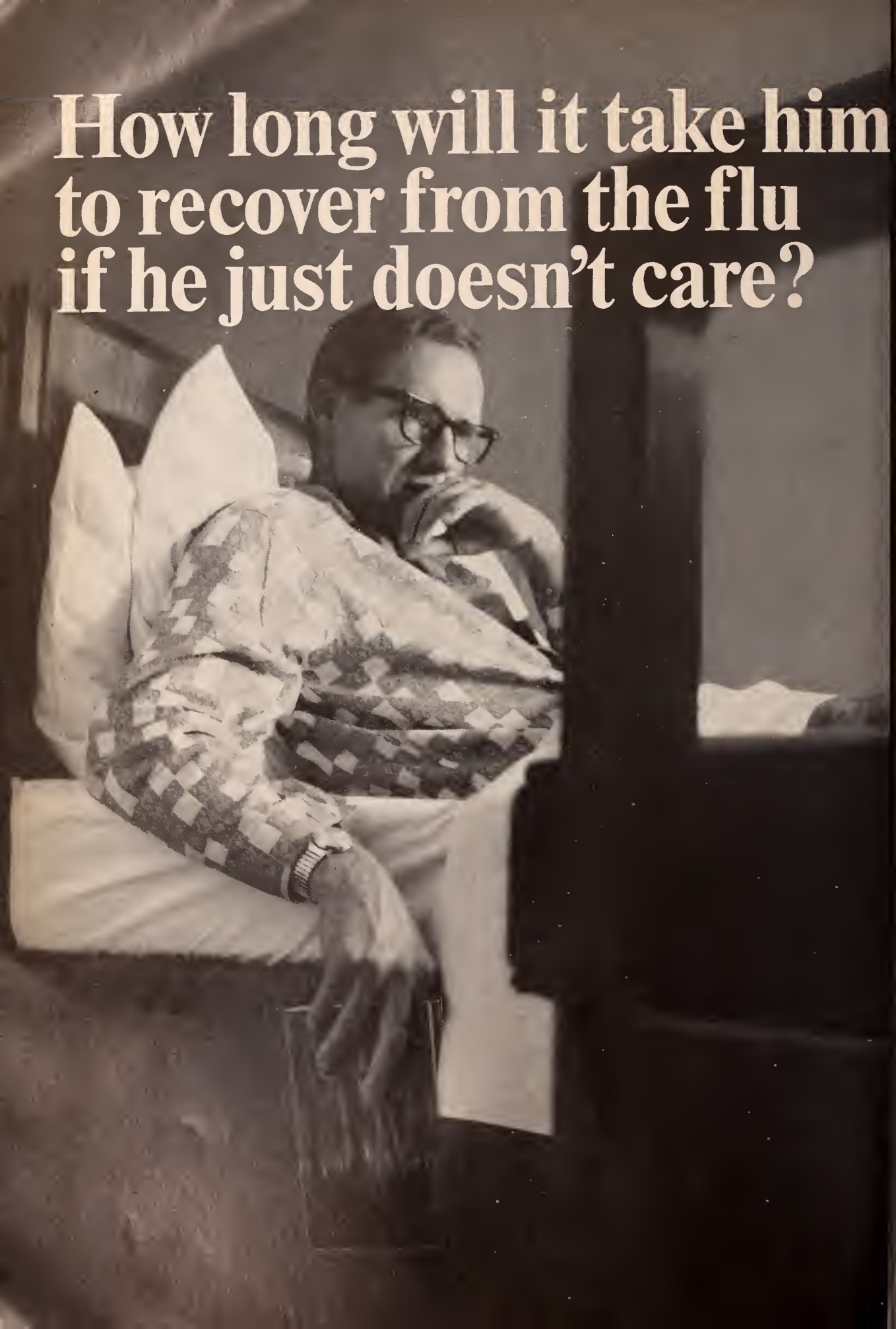


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Each 45 cc. (3 tablespoonfuls) contains: alcohol, 15%; pipradrol hydrochloride, 2 mg.; thiamine hydrochloride (vitamin B_1) (10 MDR*), 10 mg.; riboflavin (vitamin B_2) (4 MDR), 5 mg.; pyridoxine hydrochloride (vitamin B_6), 1 mg.; niacinamide (5 MDR), 50 mg.; choline,† 100 mg.; inositol,† 100 mg.; calcium glycerophosphate, 100 mg. (supplies 2% MDR for calcium and for phosphorus) and 1 mg. each of the following: cobalt (as chloride), manganese (as sulfate), magnesium (as acetate), zinc (as acetate), and molybdenum (as ammonium molybdate).

*Multiple of adult Minimum Daily Requirement supplied.
†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing life experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

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Adverse Reactions: Idiosyncrasy, such as excitement, hangover, or pain, may appear. Hypersensitivity reactions occur in some patients, especially in those with asthma, urticaria, or angioneurotic edema.



Dosage: 1½ to 3 grains at bedtime.

Supplied: ¾, 1½, and 3-grain Pulvules®.

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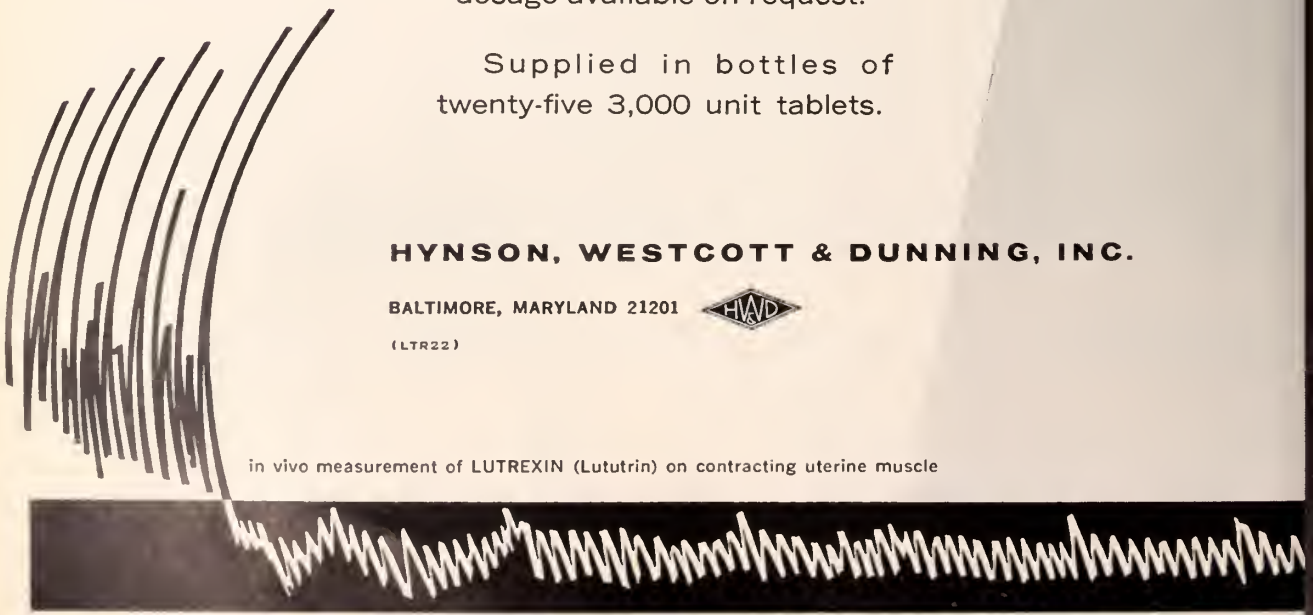
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Vitamin B_6 (Pyridoxine HCl)	2 mg
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EDITORIALS

A New Development In Patient Care

One of the by-products of the Medicare Program has been the concept of the extended care facility. As explained in our December 1966 *Membership News Letter,* an extended care facility is a special kind of nursing facility, designed to offer continued skilled post-hospital care to patients who are no longer so seriously ill as to require a hospital bed, but yet need more medical or nursing care than they could receive at home. Under the regulation of the Federal Government, an extended care facility may be an independently functioning institution or it may be a ward, wing, or separate building of an institution so designated and certified as an extended care facility.

This is going to lead to the creation of an institution placed between the nursing home, or convalescent center, on one hand, and the traditional hospital. There will be patients who should not be taking a hospital bed, needed for the care of the acutely ill, yet who are not well enough to be at home, or to get the custodial type of care which is provided, often very tenderly and affectionately, by the nursing home or convalescent center.

On page 139 of this issue we give a list of the approved extended care facilities in our State. It will be noted that some of these are nursing homes which have been able to meet the standards of the Federal Government with respect to medical attendants, facilities, equipment, and safety. Others are hospitals which have set aside wings or pavilions for this purpose. This is only the merest beginning of what will surely be a much larger roster of such facilities in New Jersey. This new development offers a greater flexibility in the patient care program than we had heretofore.

The Department of Health, Education, and Welfare has now made available a 55-page manual containing detailed information for extended care facilities under Medicare. Copies may be obtained from the Social Security Administration, Washington, D.C.

Compulsory Generic Prescribing

Compulsory generic prescribing legislation had been introduced in the 89th Congress by Senator Russell Long. It is expected to be reintroduced in the present Congress. It would *compel* all of us to prescribe drugs in generic terms for patients under Medicare, or other federally financed health programs for welfare recipients. Pharmacists would be required under the measure to dispense so-called generic drugs regardless of whether the physician orders a specific brand or designates the product of a particular manufacturer.

C. J. Stetler, President of the Pharmaceutical Manufacturers Association has said that this compulsory generic legislation would deprive physicians of their hard-won right to determine the precise treatment for their patients. It would also take away from the patients the assurance they will receive only the best and most suitable medicines for their individual needs. It is suggested that this would threaten the future strength and viability of the drug industry itself.

Proponents of this bill assert that drugs from different manufacturers are "equivalent" and will have the same therapeutic effect if they contain the same active ingredient meeting minimum standards set forth in the United States Pharmacopeia or the National Formulary. But as Mr. Stetler says: "There is as much difference between drugs with the same generic name as there is between people with the same family name. In the market place there are high quality products and low quality products and many grades in between. Medical, pharmaceutical, and other scientific annals, extending back more than twenty years, contain many convincing reports of in-

vestigations which persistently support the contention that generic identity does not necessarily assure equal therapeutic effectiveness."

Manufacturer identification has already proved itself to be the most practical and reliable measure of trust in the prescribing of drugs. If the medicine is the product of a quality manufacturer, he explained, the physician, nurse, and pharmacist can be certain that it has been carefully formulated and its production has been rigidly controlled throughout the entire process. Identification of a particular manufacturer also leads to a competition for recognition among quality producers, he added, and this is the patient's strongest safeguard.

It is impractical with thousands of manufacturers to expect any government agency to guarantee that every product will be of high quality. This would require analyzing every batch of every product made by every company, an obvious impossibility. Clearly, the public interest must be served by the manufacturer's sense of responsibility, his integrity, and an enlightened, if selfish, motivation to excel. Our present prescribing system places a premium on product and manufacturer identification.

Of course, there is nothing wrong with generic prescribing — provided the drugs dispensed are pure, potent, effective, quality products made by a manufacturer who values highly his name and reputation, and who is known and trusted by the prescribing physician. And it would be naive to assert that all products bearing a brand name are quality products and those sold generically are suspect. Some of the most reputable firms manufacture and market both brand name and generic drugs. Their products are uniformly of high quality. On the other hand, some of the shoddiest firms manufacture preparations by brand names as well as generic names. Their branded products are as questionable as their generic products. In the last analysis, the doctor must himself make his own decision when he picks up his prescription pad.

Towards A Definition Of Death

It is easy enough to assume that death and life are opposite; that the patient is either dead or he is alive; that the phrase "more dead than alive" is meaningless, since you must be one or the other. But must you? Experimenters have long known that you could rig up a heart-lung preparation in which the blood would be picked up from the aorta, cannulated through tubes, brought into the right atrium, circulated through the lungs and all four heart chambers and back to the aorta. The rest of the animal dies, but the heart and lungs keep working for quite a while. Is this animal, while the heart is beating regularly, still a "live" being?

Suppose an electro-encephalogram taken from an unconscious patient shows no cerebral electrical discharge at all. So far as we now know, there would be absolutely no way of restoring consciousness after the first few minutes of cerebral death. But breathing and heart-action might be kept going for a long time (certainly for many days by intravenous medication or by maintaining perfusion through artificial circulation). During that period is the person alive? And would it be murder for the doctor to withdraw the intravenous needle or terminate the artifical circulation?

Or, consider the problem of transplanting an organ from a dying individual. The sooner the kidney is removed for transplant, the more likely it will be serviceable. We are revolted at the picture of a surgeon keeping a death watch, his gloved hands poised to snatch the kidney at the moment of death, or at the moment just before death. When is that moment?

A surgeon might briefly maintain a short life span by some swift operation in a dying, unconscious person. Is he a murderer if he refuses to try? The question reduces itself to the deceptively simple one of differentiating the prolongation of life from the prolongation of dying.

Is death to be defined as a heart that stops? As the cessation of breathing? As a failure to get any electrical response from the heart? As an electro-encephalogram that registers nothing from the brain?

Nor can "artifical maintenance" be the criterion. The respirator can maintain breathing by "artificial" means. Is this patient dead while he is breathing? We can maintain tissue perfusion for a long time in persons with irreversible coma. Has death then occured? Possibly the simplest criterion (though one seldom suggested) is that the person is dead when the cerebrum stops radiating electric impulses. But this would require the electro-encephalographic study of every "dying" person, and lead to the curious conclusion that a person could be dead while his heart kept beating through artificial tissue perfusion. Perhaps we have to define life and death at two levels: at the level of tissues, and at the level of total human beings. While the tissues are not alive if the "total person" is dead, the reverse is not necessarily true. Many cells in many tissues can be biologically alive, while the being is not, in any meaningful sense, alive at all.

The world has the right to look to our profession for a set of internationally acceptable criteria for the definition of death. Death has always been the enemy we have been trained to fight. In one sense, we never conquer death; we only postpone it. But it does seem odd that after many millenia of coming to grips with it, we have never even defined the enemy.

The Bedside Scientist

Modern scientific methods are indeed magnificent. The white-coated investigators do their research, the chrome-plated equipment shines, fluids bubble in their retorts, and computers' lights flash gaily. But the accuracy of it all depends on the validity of the basic bedside investigation. Poor observation at the first doctor-patient contact point will produce errors that no amount of scientific processing can ever correct.

And to improve this kind of observation, no special machinery is needed. We need here sophisticated physicians rather than sophisticated equipment. The doctor in the front line needs four skills: he must know how to ask about and react to complaints; he must know how to solicit a history — which again means knowing what questions to ask; he must know how to do a meticulous physical examination; and he must know how to register, record and, when needed, to retrieve his findings. And he needs a fifth sense too: a kind of human compassion which tells the patient that he *is* interested, so that — warmed by this kind of rapport — the patient's story will be more meaningful, as well as more productive. Here then is the beginning of all medical research; the prime data for the "programming." This too is science as well as art. Perhaps our increasing concern with the laboratory has dulled the edge of our diagnostic clinical acumen. Or, the glamor of equipment has downgraded the traditional bedside skills. There should be comfort in the fact that the one doctor who won't be replaced by a push button is the clinician who has to assemble the data to feed into the machine.

Physician's Responsibility For Suicide Prevention

The doctor is often the first professional person with whom a potential suicide may come into contact. However, the physician may have to walk a fine line between his ethical responsibility to preserve the patient's privacy when the threat of suicide is not serious, and his responsibility to save life when it is.

This responsibility for taking preventive action in suicide threats is an added role for the physician, one he has been asked to assume only recently. Solomon[1] has developed a multistep test for determining the seriousness of a suicide threat. The physician's responsibility for preventing suicide increases with each indication that the patient's threat is serious.

Murphy and Robins[2] have noted that alcoholics who have recently lost a loved one are

particularly vulnerable to suicide. They report that among 31 consecutive alcoholic suicides in an urban area, nearly half the deaths occurred within a year after the loss by death, divorce, or separation of someone close to the victim. The majority of these suicides happened within six weeks of the loss.

It is impossible to prevent many suicides, partly because the triggering emotional crisis cannot be anticipated. It is possible, however, to determine when a person is alcoholic and to anticipate such crises as divorces and separations.

"Probably most normal people have had suicidal or homicidal thoughts at some time in their lives," Solomon[1] writes. When they talk about these in the doctor's office, it may not be serious at all. But if, when the doctor asks, "Have you thought about *how* you would do it?", the patient has some positive answers about sleeping pills, jumping, drowning, shooting, etc., then further questioning is called for. Now, an affirmative answer here forces the physician to consider himself involved in the burden of responsibility (for preventing suicide), though not yet heavily. He must certainly pursue the issue a bit further. He must ask if the patient made any move to implement his impulse for killing. Has he saved up pills and hidden them away for later use? Has he bought a rubber hose to fit onto his auto exhaust pipe? Has he gone to the top of a high building to "have a look?"

If the patient has taken any action in preparation for violence, the physician's responsibility becomes strong. With few exceptions, he must share his burden with the patient's family and recommend psychiatric consultation. In homicidal threat there should be referral to civic authorities. Hospitalization should be seriously considered. One suicide attempt enormously increases the likelihood of another. A physician may not be too concerned over the taking of two or three sleeping pills or light scratches on the wrist — these may be only "gestures" for getting attention. But — and this may be literally a life and death matter — when a wife turns on the gas just before her husband is expected home, or when someone takes enough pills to sleep all the next day, or any suicide atempt is made in which a note is left, there is an indication of a serious suicide attempt. If the patient is actively suicidal, he has to be told that the physician's responsibility may have to go beyond, or counter to, the patient's wishes in order to protect him. Hospitalization must certainly be considered seriously and the relatives consulted. A psychiatric consultation should be the rule. Nor can the patient be abandoned; indeed, the doctor's responsibility means that he must stay with the case until the burden is clearly taken over by someone else. A patient's insistence that the doctor leave him alone may or may not be "legal" grounds for this abandonment. But there would be no ethical justification for it.

Commenting on this dilemma, the J.A.M.A.[3] says that this burden of responsibility is relatively new. The *Journal* adds that:

"The physician's involvement in a death caused by violence has been limited until recently to giving expert testimony. The doctor merely assisted legal authorities in pinpointing the time of death or in clarifying the nature of sustained injuries.

"To this traditional role has now been added another — one much more meaningful and responsible. The physician is expected to help prevent the violent act — obviously no small responsibility — through early recognition of its threat in his emotionally disturbed patients."

The physician often is the only one aware of the oncoming disaster. His foreknowledge places a responsibility on him. Even when it is ultimately shared with psychiatric consultants, patient's relatives, and hospital or civic authorities, the burden of this responsibility is nonetheless primarily his.

1. Solomon, Philip: J.A.M.A. January 30, 1967

2. Murphy, George and Robins, Eli: J.A.M.A. January 30, 1967

3. Editorial in the January 30, 1967 J.A.M.A.

ORIGINAL ARTICLES

In this brief but inspiring address, our Executive Director lights up the ideals of medical education and the aspirations of medical practice.

The Education Of A Doctor

Richard I. Nevin/Trenton

Medicine as a profession, when properly practiced, is a form of realistic idealism. That is to say, it is a form of service that is the result of dreamers' making their dreams come true. Medicine is a noble profession not because it transports and transforms matter-of-fact individuals who have become associated with it, but because so many truly good and great men and women have given of their high intelligences and refined spirits to it, and have lifted it above most other merely human callings.

Medicine is rooted in respect for life and for the Creator of life. It cherishes and seeks to preserve and extend this great gift which God alone can give. It is great-heartedly motivated by deep love for fellowmen. It is moved to compassion by a fellowman's suffering, and to heroic limits of self-sacrificing service by the consciousness of a fellowman's real need.

Medicine is all these things, or it is not medicine at its best and as it should be. It is and must be all these things or else it could deteriorate into a shoddy commercial venture, indifferently capitalizing on the sufferings of others for exclusively selfish advantages.

Our professional forebears and our contemporaries have given medicine into our hands at its hallowed and exalted best. It is our challenge — and a most difficult one in these spiritually unaspiring, materialistic times — to preserve it from corruption and debasement and to keep it, clean and undefiled, a source of satisfaction to God and men alike.

There are wild winds of contagion blowing fiercely upon the society of our times. There are lethal germs of spiritual, intellectual, moral, and social corruption abroad in the world and in our land. The men and women in whose hands will be the molding of the character of the professions through all the tomorrows are undergoing the formative processes of their education now. If, as men and women, they are ultimately to prefer to serve not God, but Mammon; if they regard their own selfish ends and desires as alone worth seeking; if for the attainment of their ends and desires, they regard God as only a name to be evoked for rhetorical effect but not as the Creator to whom they must account for their talents and their stewardship; if the sole authority that they accept is that of their own minds and wills; if the good is, to them, that which works for their satisfaction, and evil is that which would defeat their purposes or "cramp their style;" if justice is whatever they want regardless of the rights of others, and alleged right is their title to unmerited rewards; if honor is, in their parlance, "for the birds," and love just raw sexual hunger; if respect is outmoded and gentility spurned; if noise is music and drivel poetry; if education is the process to equip them to demand and get more, and if the material amount of that "more" is the measure of their success as human beings . . . if all these things show signs of coming to pass — and they increasingly do — then for the preservation of the professions, medicine among them, for the restoration of the balance of justice and reason that alone can produce social concord and peace, and for the reclamation of civilization itself, we must concern ourselves — and instantly — with the quality of the product which our present system is producing today.

I speak primarily concerning the good of medicine, but these considerations are equally germane and equally applicable to all other human vocations and activities, to all levels of civilized life.

A man's education is properly a life-long process — it is not limited to his schooling. It is, rather, that complex and continuous process by which — with the aid of parents, teachers, spiritual mentor's, and his own disciplined intelligence — a man enlightens his mind by the acquisition of truth, and disciplines his will in the pursuit of that which is genuinely good, so as to enable him to live with fruitful satisfaction to himself, his relatives and friends, his fellowmen, his country, and his God. A man's education is that life-long process that he consciously and constantly pursues in order to discover and develop his own best and, throughout his life and every aspect of his living, to make the most *of* that best.

Notice, I have not said to make the most *from* it. Certainly every man has the duty and responsibility to acquire enough money to keep himself and his dependents in freedom and dignity. If, however, money is his only goal and his only acquisition — since the government takes most of it from him and death takes all that is left — such a man is a fool. It is of him, or such as he, that Kilmer spoke when he said,

And when you think of love and fame
And all that might come to pass,
Then don't you feel a little shame
And don't you think you were an ass?

Since education is a continuing process, formative of a person's character and life, medical education and training must build upon the foundations already laid in the lives of those who submit to it. Society produces the man or woman who becomes a candidate for medical education. Thus society must share in the work and the responsibility of evolving the doctor of medicine as he ultimately is. Medicine says, therefore, to society: "Give us a good man or woman properly informed, motivated, and disposed, and we will do our part to give you a good doctor." . . . "Give us the sound cloth of your weaving and we will tailor it to serve and satisfy you well."

At the present time the almost 90 medical schools of the United States turn out about 7,000 new doctors of medicine a year. It is estimated that by 1975, to meet population expansion, over 10,000 medical graduates a year will be required. This means more candidates, more schools, more faculty, more facilities of all kinds, and more — much more — money.

Unfortunately the present system of taxation levies heavily on those whose personal philanthropy formerly used to support medical education and health care. So that more money which is needed means more taxes for the taxpayers to provide. Somewhere, someday, a decision will have to be reached as to how much and how many programs taxpayers can support without themselves turning to government for their maintenance and giving up the ghost. However, the good that medicine does is measurable and indispensable. Better than most programs that demand monied support, medical education and health care represent a sound investment.

Within the last century, Medicine and Surgery have made more progress than in all the centuries and in all the millennia before. Diseases have been conquered by the score, and surgical procedures have been introduced that have about them the aura of the miraculous. People are living longer and have better health than ever before. Whether they are using the added years profitably or are living more happily are questions for philosophers and those who are sensitive to social tendencies and developments to evaluate. But medicine is doing its job, with a magnificence of accomplishment never before known. And the hard work of dedicated research scientists, teachers, students, and practitioners has produced this happy situation.

That medicine has succeeded in its goals is clear because death is now matter-of-factly bested, and men and women live to healthy

old age. When our economy succeeds, they will thus live on without jeopardizing either their own or the nation's financial soundness and security. When government succeeds, they will live — secure in their lives and property — in justice and in peace.

At any rate, let all of us work together to preserve and advance the progress that medicine has made. It spells wealth of life for all. Let us encourage the young to dedicate themselves to others, to find the joy of worthwhile service and of true success. Let us not penalize those who do so dedicate their lives by making them the objects of undeserved criticism or disparagement, or by imposing upon them demands impossible for them to meet without loss of their status and dignity as free men and women.

We need doctors. Let us keep them coming by producing men and women of the character of which good doctors are made. Let us support them in the areas of medical education and protect them from harassments that might discourage their enthusiasm or their efforts.

Medicine and medical education preserve life and health for all, and with life and health they set us free to indulge in the pursuit of happiness . . . and that, as we all know, sums up the American Dream. Here's to its fulfillment for us all!

315 West State Street

Measles Vaccine Is Safe And Effective

Clinical tests show that a type of measles vaccine now in use consistently gives a high degree of immunity with only one immunization and without causing rashes or illness. The safety and effectiveness of the vaccine should make the task of eliminating measles in this country somewhat easier.

A report of tests on 14,000 children in the United States and Mexico appears in the January 2 *Journal of the American Medical Association*. The preparation is described as a "highly (or further) attenuated live vaccine." However, two other types of measles vaccine are available and are effective. One type has caused rash in 40 per cent of all children immunized. The second type does not cause significant reactions, but a series of injections is necessary to produce satisfactory measles protection. In some cases, this immunity has been relatively short-lived.

"It was very unusual," the report said, "for a vaccinated child to show more than two or three of the symptoms usually seen with natural measles." In most cases, these symptoms were a mild rash or a slight temperature. The effectiveness of this vaccine as an immunizing agent appears to be outstanding." Vaccination against measles should be, by now, a "routine procedure," the report pointed out.

The American Medical Association has urged physicians and medical societies to lead the drive to eliminate measles in this country. "Ridding the nation of measles is possible in the foreseeable future," said a recent statement of the AMA's Council on Environmental and Public Health. The Council made these recommendations:

All children should be immunized when approximately 12 months old.

Eventually, all measles-susceptible children should be immunized, but the first effort should be to protect infants and those entering kindergarten and the first two years of elementary school.

Older children should be immunized only on an individual basis, and not as part of a mass vaccination program. An exeption, the Council said, is when large numbers are measles-susceptible, as in isolated geographic regions.

Schwartz, A. J.: *Journal of the American Medical Association, January 2, 1967.*

A new and simple working classification of primary myocardial disease is here proposed by the Beth Israel Group.

Dynamic Classification Of Primary Myocardial Disease*

Edwin L. Rothfeld, M.D. and I. Richard Zucker, M.D./Newark

Primary myocardial disease describes a variety of disorders that involve the myocardium and spare the other components of the cardiovascular system. Because of confusion in nomenclature and diagnosis, primary myocardial disease has been considered rare or unimportant. This has led to serious errors in management. The literature is replete with an array of titles applied to the same entity by different authors: myocardiopathy, cardiomyopathy, cardiopathy, myocardosis, diffuse myocardial disease, idiopathic cardiac hypertrophy, idiopathic cardiomegaly, and many others. Most investigators[1] now agree that primary myocardial disease is the best designation. The clinical manifestations are difficult to evaluate, because primary myocardial disease may simulate almost any other cardiac disorder. Prominent systolic and diastolic murmurs, and roentgen evidence of left atrial enlargement and Kerley B lines suggest rheumatic heart disease. Pericardial involvement is frequently considered because of distended neck veins, pulsus paradoxus, faint heart sounds, feeble cardiac pulsations, roentgen cardiac contour, and dynamic evidence of constrictive pericarditis. An enlarged left ventricle and the finding of systemic hypertension during episodes of cardiac failure mimic hypertensive heart disease. Arteriosclerotic coronary artery disease is sometimes diagnosed in these patients because of anginal pain, pseudoinfarction patterns in the electrocardiogram, and the frequent occurrence of conduction defects and ventricular arrhythmias.

The purpose of this report is to present a classification of primary myocardial disease based on dynamic findings in 24 consecutive patients studied by us in the past 18 months. A similar system[2] has proved useful in the evaluation of patients with mitral stenosis. It is hoped that the proposed dynamic classification will serve to clarify existing problems in diagnosis and management.

Material and Methods

The series includes 24 consecutive patients referred for dynamic studies in the past 18 months. From this series, we eliminated hypertensive, arteriosclerotic, rheumatic, pulmonary, congenital, and pericardial heart diseases. Also excluded were patients with myocardial involvement secondary to known infectious, toxic, metabolic, neuromuscular, and infiltrative diseases. Cases of suspected primary myocardial disease were accepted for study only if they had both an abnormal electrocardiogram and cardiomegaly by roentgen criteria. The 24 patients included six females. For the whole series, the age range was 11 to 62 years, with a median age of 38.

Complete catheterization of the right and left heart was carried out in each patient in the basal state, using methods previously de-

* From the Institute of the Newark Beth Israel Hospital.

scribed[3] by us. In addition to the usual measurements of pressure and oxygen saturation, pressure gradients were determined across the outflow tracts of both ventricles before and after infusion of isoproterenol or inhalation of amyl nitrite. Dye-dilution curves were obtained selectively to eliminate intracardiac shunts and valvular dysfunction and to quantitate cardiac output. Left ventriculography was performed in all cases, and right ventriculography was carried out only where there was dynamic evidence of obstruction to right ventricular outflow.

Results

There were no untoward reactions to catheterization, injection of opaque media, or the use of isoproterenol or amyl nitrite. Short runs of ectopic ventricular beats occurred during ventriculography in most cases, but these required no treatment. The patients were classified into four groups based on the dynamic data: I—Normal dynamics; II—Outflow tract obstruction; III—Myocardial failure; IV—Restrictive phenomena.

I—*Normal Dynamics*—Eight patients had completely normal findings on catheterization both before and after the administration of isoproterenol or amyl nitrite. Pressure pulse contours were normal in all chambers. There was no evidence of outflow tract obstruction or ventricular end-diastolic hypertension. The cardiac output was normal in all these cases. Left ventriculography demonstrated minimal to moderate dilatation of that chamber in all, and a mild degree of mitral regurgitation in four cases. Six of these eight patients were asymptomatic; two had vague complaints of dyspnea and weakness that were difficult to evaluate. Physical examination was normal in all. Abnormal electrocardiographic findings included broad, notched P waves, left ventricular hypertrophy, atrioventricular and intraventricular conduction defects, tachyarrhythmias, and nonspecific ST-T changes. X-rays showed some degree of left ventricular enlargement in all and a prominent left atrium in two instances.

II—*Outflow Tract Obstruction*—In nine patients, pressure gradients greater than 10 millimeters of mercury were demonstrated across the left or right ventricular outflow tracts, or both, either before or after the use of isoproterenol or amyl nitrite. Four had important gradients across the left ventricle, two across the right ventricle, and one patient had gradients across both chambers in the control state. Left ventricular gradients were unmasked in two additional cases after the drugs were administered. Gradients on the left were between 32 and 144†, while those on the right ranged from 22 to 40†. There was no evidence of valvular or supravalvular obstruction in any. Two patients had evidence of left ventricular failure in addition to hypertrophic subaortic stenosis; interestingly, these were brothers. Cardiac outputs were normal except in the two instances of left ventricular failure. Left ventriculography showed the typical findings of hypertrophic subaortic stenosis in the seven patients with left ventricular gradients. A moderate degree of mitral regurgitation was seen in five of these. Right ventriculography revealed an abnormal outflow tract in only one case.

Clinically, the two patients with dynamic evidence of left ventricular failure complained of anginal chest pain, exertional dyspnea and easy fatigue. The remaining patients in this group were asymptomatic. Harsh to blowing ejection murmurs, beginning in the aortic area and radiating to the apex, were heard in all cases with left ventricular gradients, although the murmur was frequently transient. A murmur of mitral regurgitation was also detected in three. Paradoxic splitting of the second sound was heard in two cases. An ejection murmur was heard in one of the two patients with a right ventricular gradient. The electrocardiograms were similar to those in the first group with the exception of prominent septal forces that mimicked pathologic Q waves. X-ray examination revealed enlarged left ventricles and atria in all cases with no enlargement of the right side. The aorta was normal.

† Millimeters of mercury

III—*Myocardial Failure*—Data consistent with left ventricular failure were obtained in five cases, in addition to the two that had combined left ventricular outflow obstruction and failure. The resting cardiac output was subnormal and there was left ventricular end-diastolic hypertension in all. Forward cardiac index ranged between 1.65 and 2.10 liters/min/M^2, and left ventricular end-diastolic pressures measured 14 to 42†. Left ventriculography showed moderate to marked dilatation of that chamber in addition to moderate mitral regurgitation in all five cases. Four of these patients had moderate to marked exertional dyspnea, orthopnea, paroxysmal nocturnal dyspnea, and peripheral edema, while one denied all cardiovascular symptoms. Of interest was the finding of transient systemic hypertension in all five cases. The murmur of mitral regurgitation was heard inconstantly in three patients. The electrocardiograms were similar to those in the other two groups, while the x-rays demonstrated left ventricular and left atrial enlargement in addition to pulmonary vascular congestion.

IV — *Restrictive Phenomena* — Evidence of restrictive myocardial dysfunction was seen in two cases. The dip-plateau ventricular pulses and the M-shaped atrial pulses were indistinguishable from those described in constrictive pericarditis.[4] The left ventricular end-diastolic, mean left atrial, and pulmonary arterial diastolic pressures were identical. The cardiac output was slightly reduced in one and normal in the other. Left ventriculography showed reduced amplitude of ventricular contraction in both. One patient was asymptomatic, while the other had exertional dyspnea and edema prior to digitalization. Physical examination was normal in both. Electrocardiograms showed only nonspecific ST-T changes. There was no evidence of pericardial thickening or calcification on x-ray.

Discussion

This dynamic classification of idiopathic myocardial disease provides a useful schema for evaluating the functional alterations in these patients at rest, after exercise, or after the administration of a beta-adrenergic stimulating drug. In addition to assessing the myocardial fault, it is hoped that such a system will allow for more precise therapy in the future. The group manifesting obstructive phenomena may benefit from surgery or some form of nonsurgical beta-adrenergic blockade. Prolonged bed rest, administration of inotropic agents, careful management of fluid and electrolyte balance, adrenocortical steroids, and anticoagulants have all been suggested for the group characterized by myocardial failure. Patients with normal dynamics frequently have disturbing arrhythmias, conduction defects, and thromboembolic phenomena that require appropriate therapy. The restrictive group must be recognized in order to avoid unnecessary thoracotomy for constrictive pericarditis.

Dynamic assessment may also be of value in gaining more information about the natural history of the disease. At present the prognosis for these patients is still unknown, probably because primary myocardial disease includes a large group of disorders. The response in the failure group is especially varied. These patients may slowly recover, resulting in fairly good myocardial reserve; they may stabilize at a suboptimal level of myocardial performance; or they may pursue an inexorably downhill course. In others sudden death may occur as a result of arrhythmias, conduction defects, or major thromboemboli.

There can be no doubt that primary myocardial disease occurs commonly. This has not been appreciated in the past because of confusion in differential diagnosis; primary myocardial disease is indeed the great masquerader. Our series would probably be much larger if we did not require both an abnormal x-ray and an abnormal electrocardiogram; if we included myocardiopathies of specific etiology; and if referring physicians were alerted to the clinical manifestations of the disease. Further, we omitted several cases of primary myocardial disease associated with other forms of heart disease. In the past six months we have seen three autopsy-proved instances of coexistent primary myocardial and congenital heart disease.

The proposed dynamic classification requires some additional comment. We have seen innumerable patients with bizarre electrocardiograms characterized by panconduction defects and unusual arrhythmias who, nevertheless, have no cardiomegaly on physical or roentgen examination.[5] While these patients were not included in this series, the electrical disturbances may be disabling and even fatal. The group with normal dynamics probably should be restudied with more subtle testing of myocardial function, such as the determination of the first derivative of the ventricular pressure pulse and the ratio of stroke volume to ventricular end-diastolic pressure before and after exercise. It is likely that some of these cases will prove abnormal by such refined testing. Patients with restrictive myocardiopathy must be differentiated from those with constrictive pericarditis because of the value of surgery in the latter. Unfortunately, dynamic data may be identical in these instances and further procedures such as thoracotomy and myocardial biopsy may be necessary to resolve this problem. It is to be noted that some patients may have dynamic evidence of both obstruction and failure as was noted in two cases in this series.

A plea is made for a more energetic approach to the diagnosis and management of patients with obscure or undiagnosed heart disease. Cardiac catheterization and angiocardiography should be considered for all patients with unexplained murmurs, cardiomegaly, anomalous electrocardiograms, characterized by multiple conduction defects and arrhythmias, and cardiac failure of undetermined etiology. The clinician must be aware of the fact that patients with primary myocardial disease may be elderly; they may have chest pain that suggests an ischemic origin; they may have murmurs consistent with rheumatic or congenital heart disease; they may have transient systemic hypertension, especially during episodes of left ventricular failure; they may have systemic and pulmonary emboli; and they may present as constrictive pericarditis, both clinically and dynamically. We feel that cardiac catheterization and angiocardiography will help to resolve many problems concerning diagnosis, prognosis, and treatment of this poorly understood but relatively common disorder.

Summary

1. Dynamic studies were carried out in 24 consecutive cases of primary myocardial disease referred to our laboratory.

2. A working classification based on these data includes four groups: I — normal dynamics; II—outflow tract obstruction; III—myocardial failure; IV — restrictive phenomena.

3. It is hoped that this dynamic classification will provide a more rational approach to the diagnosis and management of patients with primary myocardial disease.

Bibliography

1. Mattingly, T. W.: Modern Concepts of Cardiovascular Disease 30:677 (1961)

2. Rothfeld, E. L. and Zucker, I. R.: JOURNAL of The Medical Society of New Jersey 61:520 (1964)

3. Zucker, I. R., Rothfeld, E. L., and Bernstein, A.: Journal of the Newark Beth Israel Hospital 15:229 (1964)

4. Yu, P. N., Cohen, J. J., Schreiner, B. F., and Murphy, G. W.: Progress in Cardiovascular Disease 7:125 (1964)

5. Rothfeld, E. L. and Zucker, I. R.: Diseases of the Chest, *in press*

201 Lyons Avenue

1967 Annual Meeting

Saturday, Sunday, Monday, Tuesday, Wednesday May 13-17, 1967
Haddon Hall, Atlantic City

If further experimentation confirms Dr. Marano's study, it would appear that diphenidol is a safe and swift antiemetic for children.

Treatment Of Nausea And Vomiting In Children With Diphenidol

Matthew J. Marano, M.D./East Orange

From studies in animals[1] diphenidol appears to rank with chlorpromazine in antiemetic activity. But it is not a phenothiazine. It has no sedative, tranquilizing, antihistaminic, or other effects characteristic of the phenothiazines.[2] In the experimental animals, it had a low order of toxicity. According to the manufacturer's laboratory data,[2] newborn and young rats quickly developed an ability to cope with it in increasingly high doses. Rats seven days old could tolerate twice the dose of newborns; and those eighteen days old, almost five times the dose of newborns.

In volunteers who took diphenidol (200 milligrams daily for 24 weeks) it did not appear to cause adverse effects on any of the systems or functions monitored, including blood, liver, kidney, blood pressure, pulse, and weight.[2] In double-blind studies in adults, it appeared as effective as prochlorperazine for controlling nausea and vomiting, and at antiemetic dosage levels the drug caused few side effects.[2]

From these findings, it seemed that diphenidol might also be useful in children to control vomiting without causing other drug effects. I then decided to evaluate it in my pediatric practice.

Patients and Dosage

Forty-five children with moderate to severe vomiting were selected. Twelve were from 6 months to 2 years old; fifteen were from 2 to 5 years old; fifteen were from 5 to 10 years old; and three were over 10 years old. Nineteen of the 45 were boys.

Eighty per cent had had nausea and vomiting from viral gastroenteritis; the others, from tonsillitis, food poisoning, and exposure to noxious fumes.

They had had nausea and vomiting for an average of twelve hours (ranging from one hour to seven days) before they were started on diphenidol. Seventeen had taken "Coke syrup," antacids, and other proprietary antiemetic remedies, but had not been able to retain them. Three had been given trimethobenzamide or chlorpromazine suppositories, without relief.

All these children were given diphenidol suppositories. Those who weighed less than 30 pounds received 12.5 milligrams — that is, half a suppository. All others were given 25 milligram suppositories. Doses were repeated every six hours. Eight children were treated for only one day; eleven for four days; the other 26 were on treatment for two or three days. Tea, juices, and other fluids to maintain hydration were given an hour or so after vomiting was relieved. Other drugs were given later as needed, including antibiotics, aspirin, antidiarrheals, and antitussives.

Results

In assessing an antiemetic in self-limiting conditions (such as in acute infectious states), one finds it difficult to judge whether vomiting subsided spontaneously or whether it was

No. of subjects	Drug Tested	Excellent Results		Good Results		Fair Results		Poor Results	
		Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
36	Prochlorperazine[4]	14	39%	19	53%	1	3%	2	5%
116	Prochlorperazine[5]	54	47%	50	43%	5	4%	7	6%
45	Diphenidol*	22	49%	19	42%	4	9%	0	0%

*this study

stopped by the antiemetic. In consideration of this, I selected children with persistent vomiting and then appraised effectiveness by their responses after the first and second doses of diphenidol, not later.

I rated responses as excellent, good, fair, or poor. *Excellent* meant that vomiting was completely controlled after the first dose and that fluids and oral medications could be retained without further vomiting.

Good meant that the frequency of vomiting was reduced 50 per cent or more with the first dose, but that a second dose was required to control it completely.

Fair or *poor* meant that occasional episodes of vomiting occurred even after the second dose, or that vomiting continued unabated.

By these criteria 22 children (49 per cent) obtained *excellent* results; 19 (42 per cent), *good* results; and 4 (9 per cent) *fair* results. There was no clue why these four children failed to get as much relief as the others for the duration of their vomiting. The severity of their symptoms was similar to those of the rest of the children. (Three had gastroenteritis and one had chicken pox.)

None of the children required hospitalization for rehydration. None of the parents noted any side effects. There appeared to be no irritation from the suppositories, nor other complaints about them; for example, the children did not try to expel them.

Case Histories

Whether vomiting had been present for a few hours or for twelve hours or longer, there seemed to be no significant difference in response to diphenidol. For example:

Case 1. Streptococcic throat: A 7-year-old girl had moderately severe nausea and vomiting that continued intermittently for 12 hours. When diphenidol (25 milligrams) was given rectally, she was able to tolerate fluids and oral penicillin one hour after the first dose.

Case 2. Viral gastroenteritis: A 2-year-old girl vomited repeatedly over a one-hour period. Her vomiting subsided completely after the first dose (½ suppository) of diphenidol, although vomiting in other older members of the family suffering the same illness and untreated continued.

Case 3. Tonsillitis: A 4-year-old boy vomited all fluids over a 36-hour period and refused all food and medication. After the initial (25 milligram) suppository, there was no further vomiting and he accepted fluids and aspirin.

Comment

In general, the phenothiazines[3] appear to be the most consistently effective antiemetic. In studies in children, prochlorperazine,[4] for example, has been reported to relieve nausea and vomiting about 90 per cent[5] of the time. The phenothiazines, however, have shortcomings: in febrile, dehydrated children they occasionally cause neuromuscular reactions. For that reason, the results reported here (see the table) may be of interest.

Summary

Forty-five children with moderate to severe persistent vomiting, associated with conditions such as acute infectious diseases and food or chemical poisoning, were given diphenidol, a new antiemetic in suppository form. Twenty-two (49 per cent) obtained complete relief of vomiting after the initial dose; nineteen (42 per cent) obtained complete relief after a second dose; that is, six hours after the initial dose. Four (9 per cent), however, had occasional episodes of vomiting even after the second dose of diphenidol. There were no apparent side effects.

Bibliography

1. Leonard C. A. *et al.:* Pharmacologist, 5:265 (October) 1963

2. Investigational Use Circular on Vontrol; Smith, Kline and French Laboratories, 1500 Spring Garden Street, Philadelphia (December 1965)

3. Moertel, Charles *et al.:* Journal of the American Medical Association, 186:116 (October 12, 1963)

4. Hopkins, C. and Geppert, T.: Journal of Pediatrics, 52:687 (June 1958)

5. Daeschner, G. L. *et al.:* Journal of Pediatrics, 53:148 (August 1958)

55 Glenwood Avenue

Missile Wounds In Viet Nam

The Viet Nam conflict is presenting new problems in treating the wounds of war. High velocity weapons are causing tissue damage greater than any previous small arms. But improved medical care is cutting loss of life on the battlefield. Rapid helicopter evacuation, adequate blood replacement, antibiotics, established principles of war surgery, and modern operating room equipment have markedly lowered the Viet Nam statistics for deaths due to wounds, compared to earlier wars.

Weapons as new as the M-16 rifle and as old as the bow and arrow created the hundreds of kinds of wounds seen at the Second Surgical Hospital in South Viet Nam. Their report is on 1,196 patients treated at the Hospital in the first five months of 1966, and particularly 521 missile wounds treated in that time. About half the missile wounds were from gunshots, and about half were due to fragments from grenades, mortars, artillery, mines, and arrows — four of the soldiers had been wounded by arrows! There were 243 wounds from Punji sticks, an ancient, but dangerous weapon of the Viet Cong. A Punji is a sharpened stick with a fire-hardened, contaminated point. It is placed in the ground at an angle designed to puncture a soldier's foot. In most cases, Punji sticks disable men about as long as would similar small-arms wounds. The surgeons said, "The Viet Cong have been ingenious in designing booby traps that utilize small-arms ammunition."

One wooden trap with a simple rubber-band mechanism and a small nail as detonator can fire a bullet or a shotgun shell when someone steps on the wire release. Another booby trap consists of two boards with three bullets imbedded in one of them. Eight pounds of pressure will detonate these bullets when the boards are pushed together by an unsuspecting soldier's foot.

The American M-16 rifle is an effective weapon. Its bullet's high velocity causes enormous tissue damage. The "tumbling effect" of the bullet after it strikes an object adds to this injury. Our surgeons realized the effectiveness of the M-16 when some of these rifles fell into the hands of Communist forces and were fired at Americans, wounding several.

Only 1.3 per cent of American soldiers wounded by missles died after operations at the surgical hospital. This is a markedly lower figure than for similar operations in Korea and World War II. Wound infections after primary wound-closure operations totaled only 2 per cent. Of those sustaining missile wounds, 58.1 per cent were returned to duty after an average stay of 16 days in the hospital.

Rich, Norman E. *et al.: Journal of The American Medical Association, January 2, 1967.*

Here is a dispassionate analysis of one of the most potentially exciting programs in modern public medicine.

Medical Activities Of New Jersey's Head Start Programs

Bernard N. Millner, M.D./Trenton*

In the past two years much money and energy have been spent on medical activities associated with "Head Start Programs." To date little of what has been learned from this experience has been published. The "needs of the poor" remain largely theoretical. The effectiveness of the Head Start approach to meeting them remains unevaluated. During August 1966 six of the 107 programs in New Jersey were visited to seek an answer to the following questions:

1. How well have these programs met the standards for health activities suggested in the original Head Start plans?
2. What health problems have been detected?
3. What has been done for them?
4. How much does it cost to provide this service?

The programs visited represent rural and urban communities of various sizes: Atlantic City, Camden, Hardyston Township, Jackson Township, Jamesburg, and Newark. The 1960 populations of these municipalities were: 59,000, 117,000, 2,206, 5,939, 2,853, and 405,000, respectively. The enrollments of the programs were: 194, 736, 29, 60, 28, and 2,810, in that order.

Physical Examinations

Many authorities have insisted that poor children need thorough examinations and pleasant individual experiences with nurses and physicians. They recommended that such examinations be detailed and individualized, and that the children's parents be encouraged to be present in order to develop positive attitudes toward health in both children and parents. Have these aims been met?

Almost all of the children enrolled in Head Start were examined. In five of the programs visited fewer than 2 per cent of the children were missed; in one program, however, 15 per cent were not examined. There was considerable variation in the quality of the examinations. In some cases the children were stripped just to the waist; and only ears, nose, throat, and chest were examined. However, in one program the children were examined in a private physician's office; each child was seen alone, and the examination was very thorough.

The number of children present in the examining room at one time may be an indication of the quality of the examination. In only one program was only one child in the examining room at a time. Another had 1 or 2 children, three had 2 to 4 children, and one had 6 to 8 children present. In five programs examinations were carried out in the school building itself, usually in the nurse's office. In the six programs 4, 5, 6, 7, 9 and 12 children were examined per hour.

The extent of examinations is indicated in Table 1. Hearts and posture were evaluated in all programs. In four, eardrums were examined. In four, feet were examined with socks

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removed. In three, the genitals of children of both sexes were examined; in an additional one, only boys' genitals were inspected. In three, abdomens were examined with the children lying supine; in the other three this was done with the child standing. Deep tendon reflexes were tested in three programs. Ocular fundi were examined by the physicians in only one program. Health histories were available to the physicians in five of the six programs. However, in three programs the physicians did not refer to them at all, and in the others they were used irregularly.

TABLE 1.

The number of programs which included various elements in physical examinations:

Heart	6	Genitals	3
Posture	6	Abdomens	3
Ear Drums	4	Deep tendon reflexes	3
Feet	4	Ocular Fundi	1

In one program all of the parents were invited to attend the physician's examinations of the children and about one-third of them actually did. In the other programs, this was not encouraged and very few parents were present.

Defects Discovered

A total of 1,309 defects (exclusive of dental) were found in the general physical examination of 3,857 children — one defect for each three children. Some, however, were probably of little significance.

The defects are listed in Table 2. The largest single group is enlarged tonsils, 28 per cent of the total. Umbilical hernias account for 14 per cent, heart murmurs for 7, enlarged lymph glands for 6, and skin conditions for 5. These five groups include 790 defects, 60 per cent of the total. It is not known how much follow-up evaluation and treatment they require. Of the less common abnormalities reported, strabismus, hearing problems, malnutrition, orthopedic defects, anemia, undescended testes, endocrine disease, nervous system defects, epilepsy, anomaly of genitals, and respiratory disease should have the benefit of further medical care. This included approximately 150 children.

TABLE 2.

Defects found in 3,857 children:

Defect	*Number*	*Per cent of all defects*
Enlarged Tonsils	372	28
Umbilical Hernia	184	14
Heart murmurs	88	7
Enlarged lymph glands	76	6
"Skin abnormality" and Ringworm	70	5
Strabismus	20	
"Hearing"	19	
"Lung abnormality"	18	
"Need Circumcision"	18	
Wax in Ears	17	
Ear Disease	15	
Obesity	14	
"Speech"	12	
Flat Feet	12	
"Feet Toe In"	11	
Malnutrition	7	
"Nose Disease"	6	
Anemia and Pallor	6	
"Nervous System Disease"	5	
"Eye Disease"	4	
Poor posture	3	
"Orthopedic Defect"	3	

2 cases each of:

Pectus carinatum
"Chest malformation"
"Pectus cavus"
Scoliosis
"Lower extremity deformity"
Undescended testes
Otitis media

1 case each of:

"Scaphoid sternum"
Poor hygiene
"Muscle status"
"Endocrine disease"
Pes equinovarus
Thumb deformity
"Hyperkinetic"
Epilepsy
Anomaly of Penis
Rhinitis
Arrhythmia of heart
Eczema
"Wheeze"

Correction of the defects discovered in the screening program was a matter of concern to the personnel in all programs visited. However, no provision had been made to pay for this care in four of the six programs. Children with defects were referred to private physicians or to public clinics for further attention. In only one program was it known how many had actually received the services they needed. In Newark, nearly half of the 1,165 children referred had received some or all of the services before the end of the summer program. Half of them had been cared for by private physicians and half in public clinics. (Funds for this purpose had been included in their budget.)

The costs of the screening programs, including physicians' and dentists' examinations, vision and hearing screening, and laboratory tests were difficult to determine. Only three of the six programs provided this information. In these, time had been contributed without charge by physicians, dentists, and clerk-volunteers. The value of this time was calculated at rates of $15, $10, and $2 per hour, respectively. The average cost per child was calculated on the basis of the total enrollment, although not all services were received by all children. The cost for the screening services ranged from $27 to $48 per child in the three programs, with an average of $28. Physicians were paid between $5 and $20 per child examined, and between $21 and $48 per hour in these three programs.

Dental Programs

Dentists were employed by all six programs. Some 85 to 100 per cent of the children enrolled were examined. The examinations were conducted in school dental clinic rooms in one program, in private dentists' offices in two, and in the school nurses' offices in three. The number of children examined per hour averaged 4, with a range from 3 to 15.

Dental defects discovered in 3,362 children examined included 7,389 teeth which needed fillings and 443 teeth which needed to be extracted, an average of 2.2 fillings and 0.13 extractions needed per child. These defects were actually concentrated in 1,076, or 32 per cent, of the children. The proportion of children with dental defects varied from 16 to 93 per cent in the various programs. An additional 206 children were found to have orthodontic and soft tissue problems needing attention. The costs of the screening were available in only two of the smaller programs, in each of which they amounted to about $5 per child.

Treatment facilities were included in the planning of three of the six programs. One of these was restricted to extractions, however. A free public dental clinic was available in a fourth municipality. Treatment programs were located in private offices in two programs, and in a Board of Education dental clinic in the third. Only one of the four programs submitting information on dental treatment costs had budgeted money for this service — about $20 per child enrolled. During the summer, treatment was started on 291 of the 654 children needing it in three programs, and services for 69 children were completed.

Vision Screening

Of the children enrolled, 3,105, or 81 per cent, had vision screening tests. The range in individual programs was from 75 to 100 per cent. Some 12 per cent of those tested were referred for further evaluation. The individual programs showed significant differences in the proportions of children referred: none was referred in two programs, 5, 13, 18, and 35 per cent in the others. Screening tests were done by optometrists in three programs and by nurses in three. The nurses used only the Illiterate-E Snellen Chart. The optometrists used more sophisticated and extensive tests. Five per cent of the children tested by nurses were referred for further evaluation; 30 per cent of those screened by optometrists were referred.

Standards for referral were failure at the 20/40 line on the Snellen chart, for those screened by that method. The optometrists' standards were "the decision of the examiner," in one program. In another, children were referred for "any pathology noted, including muscle imbalance, refractive error greater than plus 1.5 hyperopia or minus 0.75 myopia, or plus or minus 1.0 diopter astigmatism, as indicated by static retinoscopy." In the third program, children were referred if they failed a vision chart at the 20/30 line or showed evidence of muscle imbalance. In the two programs for which data were submitted, the cost of vision screening by optometrists was $2.50 and $8.00 per child.

Children who failed the screening test were referred to their own doctors or to hospital clinics. No funds were budgeted for this purpose in three programs. In one, $15 was al-

lowed for each child referred. Few of those referred actually received any care during the summer programs.

Hearing

Only three of the six programs carried out routine hearing screening of children. All three were done by nurses, two using Puretone Audiometers and one, whispered voice. In these three programs 72 per cent of the enrolled children were actually tested, and only 0.6 per cent of these were found to need referral. In a fourth program, the hearing of children was tested whenever there was a "special indication" such as difficulty in hearing or poor speech. Many children were tested. The actual numbers screened and found to have defective hearing are unavailable.

Laboratory Tests

All programs reported that urine analyses were done routinely. Statistics were available in only four programs, however. Eighty-eight per cent of the children had urine analyses. This included microscopic examination of all specimens in one program, and of those specimens which contained protein in a second. Chemical tests for sugar and protein were done on all. In two programs the tests were done in the doctors' offices, in one by a private clinical laboratory, and in one by a hospital laboratory. Eighteen specimens of the 864 on which we have data were reported to be abnormal. Follow-up was not reported. Whether any represented significant disease is not known.

Three programs had hematocrits on all children; one had hemoglobins done, and two provided no screening test for anemia. For the five programs submitting data, 21 per cent of the children had blood studies for anemia. Of the 832 children tested only 2 were reported to be abnormal.

Three programs submitted data about costs of the laboratory work. In one, the hemoglobin tests and urine analyses were done in the doctor's office, and their cost was included in his fee. In another program, hematocrit and urine analysis together cost $3 per child. In the third the hematocrit cost $3 and the urine analysis $1 per child. The two programs which omitted the blood test had urine analyses performed by the nurses or physicians at no additional cost.

Immunization Services

Surveys in many parts of the country, including New Jersey, indicate that immunization services are much needed by poverty-stricken families. Immunization histories were part of the health record made in all Head Start programs visited. Four of the programs included immunization services as a medical activity. The other two referred children who needed immunizations to private physicians or public immunization clinics. Three programs, with a total enrollment of 3,574, reported data on immunizations carried out. These amounted to 1,079 doses of DPT vaccine, 2,466 doses of trivalent oral poliomyelitis vaccine, 61 smallpox vaccinations, and 7 doses of live measles vaccine.

Tuberculin Tine tests were done in five programs: 2,922 (81 per cent) of the 3,603 children enrolled in the programs supplying data were tested. There were 13 positive reactors among the 749 reported results. Only 2 of the 13 had had follow-up by the end of September 1966. It is known that one clinically significant tuberculosis infection was discovered among the total number tested. All immunizations and tuberculin tests were done in the nurses' offices. They were all carried out by physicians except in two programs, which allowed the nurses to give the oral poliomyelitis vaccine, and one which allowed nurses to do Tine tests.

A review of the health records of the children in one of the smaller programs showed that 40 per cent of the children had had no oral poliomyelitis vaccine; 28 per cent had had no immunization against diphtheria, pertussis or tetanus; and only 4 per cent were fully protected against these diseases. Only 7 per cent

had been immunized against measles. Fifty per cent had been vaccinated against smallpox. This program was one of the two which did not include immunizations as part of their activities.

Record Keeping

Three of the programs used the health record forms developed in the National Head Start Office (CAP-HS Form 30, revised May 1965). One of the three also used a physical examination form developed for the New Jersey Office of Economic Opportunity. A fourth program used the latter form alone, and omitted entirely a health history record. The two remaining programs used their school health forms. One was supplied by the New Jersey State Department of Education (Form A-45), supplemented by its own health history form. The other was a detailed form designed by the local school health authorities. Health histories were recorded by nurses in four programs, and by nurses, volunteers, and teachers in the fifth. Physical examination records were filled out by the physicians in three programs and by the nurses in three.

Conclusions

The information contained in this report reflects only the activities of six New Jersey Head Start programs in the summer of 1966. Even for these six, information about many important parts of their medical activities was not available. The findings may not be representative of the other 101 programs, and these conclusions, therefore, may not be widely applicable. However, from the limited sampling done, the following conclusions are appropriate:

There was much variation in the quality of the health programs. For example, although the health history of the individual is of great significance in the evaluation of his health status, not all programs made use of this.

The physical examinations in several of the programs were carried out with skill and thoroughness. In others, however, examinations were hasty and incomplete. Nevertheless, a large proportion of the children examined were found to have physical defects. Evaluation of the significance of the defects is lacking. Head Start program directors were not always informed which children should be given priority for follow-up services. There is a dearth of information about the further care of these children. Few children received definitive services within 60 days of the discovery of their needs. Responsibility for follow-up supervision seems to be left to the resources of the schools which the children now attend.

The advantages of involving the parents in the screening activities were recognized in only a few programs. The opportunity to include the physician in helping to educate the families about health matters was thus lost, and, along with it, a chance to produce a durable change in the pattern of child care.

The cost of the screening services equaled or exceeded that of private pediatric care in New Jersey.

Dental screening programs reached nearly all of the children, most of whom probably would not have received this service under any other circumstances. The number of defects found confirms information gathered nationally. Three of the six programs provided some treatment, and actually began treatment of almost half of those who needed it, before the end of the summer program.

There was no standardization of methods used for vision screening. In two programs, no children were referred for definitive eye examinations, while in one program 35 per cent of the children were. There is obviously a need to make available to the health professions better standards for guidance in the area.

Only three of the six programs attempted to evaluate the hearing of all children enrolled. A small proportion (0.6 per cent) of those tested failed.

Examination of the urine of most of the children was done. About 2 per cent of specimens were abnormal. The significance of these abnormalities is not known. Neither diabetes nor any kind of renal disease was discovered.

Although the national Head Start office suggested that a screening test for anemia should be done on all children, this was done for only 21 per cent of the children in the New Jersey programs reviewed. And, 0.2 per cent of those tested were abnormal. The value of applying this test to all children may be questioned.

Where the service was offered, children enrolled in Head Start programs received immunizations at a rate of just one per child. There is good evidence that many more doses were needed. Limiting factors were the time available, and the reluctance to use two or more live vaccines simultaneously. Certainly, immunization should be included in the health activities of this project.

Tuberculin testing was surprisingly unproductive in terms of case-finding. The reactor rate, just under 2 per cent, is remarkably low when one considers that the population covered comes from the lowest income group of our communities. Only one case of active tuberculosis is known to have been found among all the Head Start participants. No information is available about cases found among the contacts of the reactors. Nevertheless, the simplicity and inexpensiveness of tuberculin testing make the discovery of even a very small number of cases sufficient reason to continue this service.

Although it is not necessary for all Head Start programs to provide identical health programs, it is clear that some of the weaker programs would benefit by adopting the standards of quality of the stronger ones. Certainly, the use of adequate health histories and thorough physical examinations should be part of every program.

The difficulty met in trying to get detailed information about the results of the examinations and screening tests, and about the follow-up of the children found to have abnormalities may represent a weakness in the administration of the medical programs. Although the physicians provided the examinations, and the nurses provided many other services, the coordination of all health services, and responsibility for final disposition of the problems seems to have been neglected. Little effort at self-evaluation was evident in most programs.

I am indebted to Miss Jo Dean Stroman, formerly of the New Jersey Office of Economic Opportunity, and to Miss Gilda Martoglio, R.N., formerly of the Maternal and Child Health Program of the New Jersey State Department of Health, who did most of the work in arranging the visits, gathering the data, and helping to evaluate the six programs visited. I am also grateful to Mrs. Jane Flipping, Director, and Mrs. Ruth Stein, R.N., Chief Nurse, of the Atlantic City Head Start Program; to Mr. William Burcat, Director, Dr. W. Frank Johnson, Coodinator, and Mrs. Sarah Sanderson, Medical Program Director, of the Camden Head Start Program; to Mrs. Nellie De Tro, Director, and Mrs. Doris Wells, R.N., Nurse, of the Hardyston Township Head Start Program; to Mr. M. C. Lucey, Director, and Mrs. Christine Yorio, R.N., Nurse, of the Jackson Township Head Start Program; to Mr. Alex Kurowski, Director, and Mrs. R. E. Wint, R.N., Nurse, of the Jamesburg Head Start Program; and to Dr. Mildred Groder, Administrator, William Greifinger, M.D., School Physician Director, and Mrs. Dorothy Young, R.N., Chief Nurse, of the Newark Head Start Program. These kind people took a great deal of time from their crowded schedules to help us to see the activities of their programs, to gather the data we needed, and to answer patiently the many questions involved in making this evaluation.

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So far as is known, this is the first successful management of an infected pacemaker without replacement or further thoracotomy.

Management Of An Infected Pacemaker

**John Zaorski, M.D.,
R. J. Yadusky, M.D., and
Joseph J. Timmes, M.D.*/Jersey City**

Reported here is what appears to have been the first successful management of an infected pacemaker without further thoracotomy and without replacement of the pacemaker or its wiring. A meticulous review of the literature has failed to turn up any previously reported instance in which a diseased pocket of an implanted pacemaker was effectively controlled, except by replacement of the pacemaker or splicing of the wires.

A 79-year-old woman was admitted after several episodes of syncope in the previous six months. Electrocardiograms varied, sometimes demonstrating left bundle branch block and at other times complete heart block with an idioventricular rhythm. Rate varied by 40 to 50 beats per minute. During one episode of syncope, ventricular standstill was recorded for four seconds.

A temporary transvenous pacemaker was then inserted in the outflow tract of the right heart chamber. Five days later a permanent pacemaker was implanted as follows: the chest was entered through the third left intercostal space, and the electrodes were implanted to the right of the anterior descending coronary artery. The pacemaker was inserted into a pocket fashioned between the ribs and pectoral muscles, and the pocket was closed with interrupted sutures of double-O chromic catgut. The thoracotomy incision was closed in layers, utilizing catgut, and the skin was closed with silk sutures. Following implantation of this internal pacemaker with myocardial electrodes, the patient's cardiac rhythm was regular, with controlled beats of 74 per minute.

On the seventh postoperative day, a serosanguinous exudate was noted draining from the wound over the pacemaker. The patient developed a temperature of 103. Wound cultures were positive for *Staphylococcus albus*-coagulase positive, and *Proteus mirabilis*. A regimen of colistimethate sodium[7] and erythromycin[8] was initiated, and the drainage ceased after eight days. The patient was discharged on the 27th postoperative day with the wound closed.

Two months later, the sinus recurred and grew progressively worse, with gradual exteriorization of the pacemaker (see Figure 1). Cultures from the wound exudate were again positive for *Proteus mirabilis*. The pacemaker was functioning well, with the cardiac rate still at 74 beats.



Figure 1

The sinus beneath the left breast was opened wide and the pacemaker removed from its pocket through a superior chest incision at the top of the pocket (see Figure 2). The pacemaker and about 12 inches of wiring were soaked in a highly efficient antimicrobial agent, providone-iodine solution,[9] for about ten minutes. The superior incision was extended to the right side of the chest and a new pocket fashioned beneath

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the right pectoral muscle (see Figure 3). A stab-wound drain was inserted in the most dependent portion of the pocket, the entire pocket washed with the providone-iodine solution, and one gram of sodium cephalothin[10] instilled. On the second postoperative day the drain was removed and the infected pocket allowed to close by granulation, a process which took two weeks

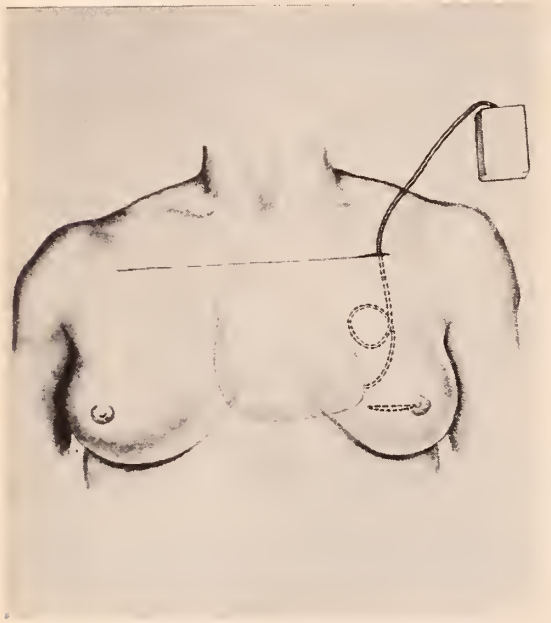


Figure 2

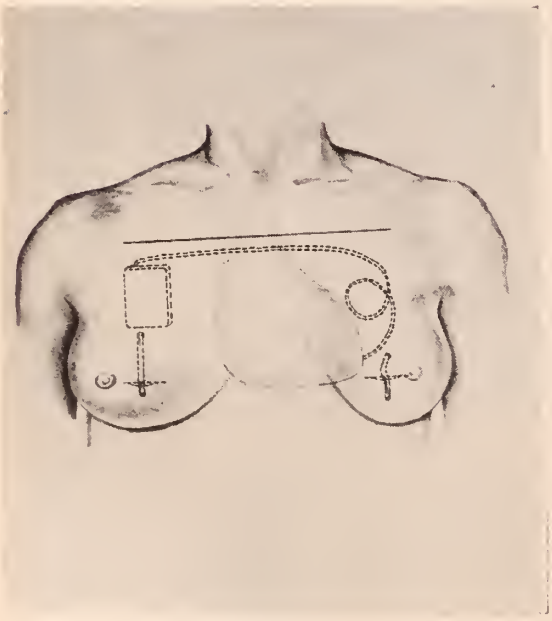


Figure 3

(see illustrations). The patient, afebrile after the second postoperative day, was administered sodium cephalothin for ten days and discharged two weeks after operation. Six months later all wounds had remained closed without sign of infection, and the original implanted pacemaker continued to function without incident in its new location.

The first symptom of infection of a pacemaker pocket is pain over the site of the pacemaker. The pain tends to disappear when a sinus develops, draining the infected pocket. As the sinus is enlarged the body reacts to the pacemaker as to any foreign body, usually resulting in partial exteriorization or ultimate extrusion of the pacemaker.[1] Infection of the pocket is hazardous in at least two respects:

1. It can result in an abscess, which may give rise to septicemia.

2. It may travel along the wires to the myocardium, thereby increasing the threshold of pacing.

Whereas, the average pulse required to stimulate the myocardium varies from 0.7 volts to about three volts, a normally functioning pacemaker usually has a pulse output of seven and a half volts. The first sign of malfunction due to myocardial infection may be one or two dropped beats. This malfunction increases progressively, as the infection raises the pacing resistance in the myocardium, until it becomes complete. Conversely, antibiotic control of an infection which has reached the myocardium has reportedly lowered the threshold.[2] The infection rate associated with pacemaker implantation varies from 1[3] to 8 per cent.[5] Davies[6] reported infections in 23 patients out of 55, the highest rate cited in the literature. This was attributed to a defect in the material covering the pacemaker. One patient died of septicemia, and nine required total replacement of pacemaker and wires.

Our patient — the one here reported — had no evidence of increased pacing threshold, which suggested that the infection had not reached the myocardium. Hence, the described procedure could be undertaken. Since the pectoralis muscles are relatively weak in the elderly, stronger support for the pacemaker can be obtained by developing a new pocket from the delto-pectoral groove downward rather than development upward from incision at the bottom of the old pocket. The described procedure spared the patient additional thoracotomy with its attendant hazards, and

eliminated the need for another expensive pacemaker.

Summary

The case of a 79-year old woman who developed an infection in the pocket of an implanted pacemaker is presented. The pacemaker exteriorized itself but continued to function well electrically. A procedure is described, utilizing a povidone-iodine solution,[9] which permitted sterilization of the intact pacemaker and its reimplantation to another site with the wires remaining intact. The infection in the pocket was eliminated through use of the povidone-iodine solution locally and antibiotics systemically. Thoracotomy and the expense of a new pacemaker were thus avoided.

Bibliography

1. Bluestone, R., Harris, A., and Davies, G.: British Medical Journal 1:1589 (June 19) 1965

2. Sowton, E. and Davies, J. G.: British Medical Journal 1:1470 (June 6) 1964

3. Kantrowitz, A.: Journal of Cardiovasc. Surg. 5:668 (December) 1964

4. Parker, B. M., *et al.*: J.A.M.A. 186:754 (November 23) 1963

5. Burchell, H. B., Connolly, D. C., and Ellis, F. H., Jr.: Am. J. Med. 37:764 (November) 1964

6. Davies, J. G. and Siddons, H.: Thorax 20:128 (March) 1965

7. Colymycin (Warner-Chilcott), 500 milligrams every six hours

8. Erthyromycine (Upjohn), 250 milligrams every six hours

9. Betadine Solution (Purdue Frederick Company)

10. Keflin (Lilly)

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Treat Snakebite By Tissue Removal

A Miami surgeon has developed a new way of treating snakebite: immediately cut away a half-dollar layer of tissue around the bite. Getting rid of this venom-filled tissue as soon as possible is "the most effective treatment," according to Clifford C. Snyder, M.D. This marks a considerable departure from the traditional cross-cutting of the bite and drawing-out of the venom. Dr. Snyder's successful treatment of 32 snakebite victims in the past two years is reported in the Journal of the American Medical Association.

Immediate tissue removal could be done by the bitten person himself. A relatively shallow cut the size of a large coin probably would get rid of most of the easily recognizable venom-killed tissue. Not many persons would be able to do this alone because of the shock of the bite and other factors. A simple slash across the bite wound would be an alternate measure preceding the more radical treatment. A tourniquet will prevent the venom's spread until a physician can perform the excision. The tourniquet should cut off only superficial circulation; it should be possible to insert a finger between the tightened bandage and the skin. But the tourniquet should be applied immediately. Later, at the physician's office or hospital, additional tissue may be removed and antivenom administered through the artery serving the bitten area.

Despite the well-known tissue-killing effects of snake venom, no amputations have been necessary in Dr. Snyder's 32 patients. Five of his series had been bitten by cottonmouth moccasins and 27 by rattlesnakes. About 87 per cent of snakebites in the United States are inflicted by the rattlesnake.

Snyder, C. C. *et al.*: *Journal of the American Medical Association, December 26, 1966.*

Some anomalies of the odontoid process can lead to gradual deterioration unless corrected by fusion or bracing.

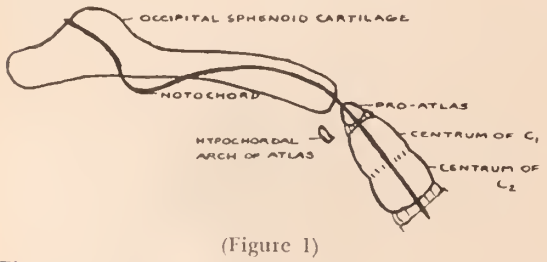
Congenital Anomalies Of The Odontoid Process

Henry H. Sherk, M.D./Camden

Patients with anomalies of the odontoid process may be difficult diagnostic problems, presenting a puzzling array of symptoms, including torticollis, neck pain, and bizarre neurologic abnormalities. Physicians should remain aware of the possibility of such an anomaly because instability of the upper cervical spine produces cervical cord compression that may be irreversible. The neck must be stabilized either surgically, or at least with a brace, to prevent such changes.

Two patients with anomalies of the atlantoaxial articulation recently came to our attention. They illustrate several important facts about recognizing and treating these unusual abnormalities.

Some understanding of the embryology of these tissues is essential to seeing how these anomalies result in clinical syndromes. As each primitive cartilaginous scleromere spreads around the notochord in the developing embryo, it divides into two parts. The upper half of one scleromere unites with the lower half of the one above to form a single mass, the centrum of a vertebral body. Differentiation progresses so that a neural arch develops along with the vertebral centrum. The intervertebral disc is intrasegmental in origin with the nucleus pulposus being formed from the primitive notochord.



(Figure 1)

Figure 1. Schematic representation of the origin of the odontoid process. The notocord is represented by the heavy line passing through the center of the odontoid. The odontoid itself is derived from the pro-atlas (basiocciput) and the centrum of C-1 (atlas). These structures are fused to the body of C-2 to form the body of the axis vertebra.

At birth the vertebrae from C-3 caudally are composed of the centrum and two halves of a neural arch. The atlas and axis differ from this pattern in several respects. The atlas is composed only of the neural arches which include large lateral masses on each side. The axis incorporates into its own centrum the body of the atlas which becomes the odontoid process. The apex of the odontoid is derived from the basiocciput.[1] (Figure 1)

The odontoid is held in place in the ring of the atlas by the transverse ligament. When the occiput and atlas are flexed on the axis, dislocation normally does not occur because the odontoid process and the transverse ligament permit motion without instability.[2]

Three types of anomalies of the atlantoaxial joint have been described:[3]

1. Absence of the odontoid.

2. Hypoplasia of the odontoid.

3. *Os odontoideum,* or failure of fusion of the odontoid to the axis.[4]

The principle feature of all three types is instability of the atlas on the axis. In the first two, the absent or hypoplastic odontoid process does not act as a restraining structure within the ring of the atlas. Even with a transverse ligament, the atlas is unstable and dislocation results. In the third type of anomaly, the odontoid may be present but is not securely attached to the axis and forward displacement of the atlas occurs. The *os odontoideum* (in these cases, a separate ossicle) is carried forward. As the atlas dislocates anteriorly, the *os odontoideum* is carried with it.

The following grouping[5] of clinical manifestations has been suggested.

1. Neck pain and torticollis following trauma to the neck.

2. Trauma followed by transient weakness of the extremities with permanent neurologic changes unlikely.

3. Slowly progressive and permanent cervical myelopathy.

4. Cerebral symptoms without neck pain or cervical myelopathy.



Figure 2. Case 1. The odontoid process has failed to fuse with the body of the axis vertebra giving rise to marked instability of the atlas on the axis. The anterior displacement of the atlas resulted in cord compression.



Figure 4. Case 2. Lateral view demonstrating the hypoplastic odontoid with beginning anterior displacement of the atlas on the axis.



Figure 3. Case 1. Anteroposterior planogram demonstrating the separation of the odontoid from the body of the axis. The odontoid is a separate structure or *"os odontoideum"* in this instance.



Figure 5. Case 2. The anterior displacement of C-1 on C-2 has become pronounced. Spinal cord compression with a severe quadriparesis resulted.

CASE ONE

A fifteen-year old boy was first seen because of four episodes of quadriparesis. He recalled no specific injury but stated that each episode had followed minor trauma to the cervical spine. The episodes of weakness and spasticity were of variable duration and severity. The most severe lasted three days. He had marked weakness in both legs during that time. A bilateral Babinski was present. X-rays revealed an *os odontoideum* with marked instability of the atlas on the axis during flexion. In the extended position the normal relationships were restored.

This patient was treated by fusion of the atlas to the axis according to technic described by Mixter, Osgood, Willard, and Nicholson.[6] After eight weeks in a Minerva jacket a satisfactory fusion was obtained. Two years postoperatively he is asymptomatic. Except for a loss of ten degrees of rotation, he has a good range of motion of the cervical spine. (Figures 2 and 3)

CASE TWO

A thirteen-year old, mentally retarded girl was found to be quadriparetic at the age of eight years. X-rays revealed marked instability of the atlas on the axis secondary to a hypoplastic odontoid process. (Figure 4) She was ambulatory at that time and was able to care for herself. Fusion was considered but deferred. She grew gradually worse over the next two years with more weakness and spasticity becoming evident in all four extremities. Fusion was rejected by her family as being too dangerous. Since then she has deteriorated markedly. At present, she is unable to stand or walk and is almost quadriplegic. She has pronounced hyperreflexia in all four extremities, bilateral Babinski, clonus, and marked spasticity. She also has a torticollis. X-rays now reveal the dislocation of the atlas on the axis to be irreducible. (Figures 4 and 5)

Anomalies of the odontoid process are being reported[7] with increasing frequency. There are twenty-seven cases of absent or hypoplastic odontoids on record and a recent article[8] reported nine cases of *os odontoideum*. Most cases are discovered after minor trauma to the head or neck. The highest incidence is in older children or young adults.[9]

There is some divergence of opinion regarding treatment. Several authors[9] have indicated that since some of these patients have done well with no treatment, fusion is not necessary.[4] Most authorities, however, state that surgical stabilization of the dislocating segments is beneficial. Some patients have been treated by fusion of the occiput to the third, fourth or fifth cervical segments.[7] Others[6] have been treated with equal success by fusion of only the first second and third vertebrae.

The first case seemed to fall into the second clinical category. There was minor trauma followed by transient weakness without permanent quadriplegia. The unstable spine was surgically fused, however, thus preventing further instability and cord injury.

The second case seemed to fall into the third category with slowly progressive cervical myelopathy. This patient, however, did not have the unstable C-1—C-2 articulation fused. It is difficult to imagine that the cord damage would have been progressive and permanent with reduction of the dislocation and fusion. It would appear that in cases of this type fusion is essential to prevent gradual deterioration.

Bibliography

1. Frayer, J. E.: *Anatomy of the Human Skeleton*. Ed. 4. London 1946, J. Churchill, Ltd.

2. Schaffer, F. P.: *Morris' Human Anatomy*. New York, 1951, The Blakison Company

3. Garber, J. N.: Journal of Bone and Joint Surgery, 46-A:1782 (1964)

4. Wollin, D. G.: Journal of Bone and Joint Surgery, 45-A:1459 (1963)

5. Rowland, L. P., Shapiro, J. H., and Jacobson, H. G.: AMA Archives Neurol. and Psychiat., 80:286 (1958)

6. Crenshaw, A. H., ed.: *Campbell's Operative Orthopedics*. St. Louis, 1963, Mosby.

7. Brannon, E. W.: Journal of Bone and Joint Surgery, 42-A:1377 (1960)

8. Gianestras, N. J., Mayfield, A. H., Provenco, F. C., and Maurer, J.: Journal of Bone and Joint Surgery, 46-A:839 (1964)

9. Gillman, E. L.: Journal of Bone and Joint Surgery, 41-A:345 (1959)

2647 Westfield Avenue

We can improve survival rates in infants with congenital heart disease. The United Hospitals group here suggests how.

Surgical Considerations In Congenital Heart Disease In Infancy*

Peter P. Poulos, M.D., et al†
Newark

Thirty years ago, Abbott[1] said: "In clinical medicine, the intimate personal knowledge of a relatively smaller number of individual cases is likely to yield a richer harvest in the understanding of diseased conditions than wider generalizations covering a more vast material." This study of 100 sick infants under 2 years of age is in agreement with that thesis. Our follow-up has accounted for 97 per cent of the cases. The three lost cases were non-surgical. The surgical follow-up was complete (100 per cent) and ranged from a period of 6 months to 4 years.

We present this series in consecutive order, to indicate how many infants died without surgery, how many were followed medically, how many had cardiac catheterization, and how many had the benefit of surgery. We present the late as well as the early surgical results, and we analyze the deaths on the basis of postmortem study.

Clinical Material

The infants ranged in age from 2 hours to 2 years (Table I). There were 42 patients under 3 months of age. Most had one or more symptoms or signs of congestive heart failure, respiratory stridor, marked tachypnea, cyanosis, or failure to thrive.

TABLE I
AGE OF 100 PATIENTS AT INITIAL EVALUATION

Age	No. Patients
0–3 months	42
3–6 months	23
6–12 months	16
1–2 years	19
Total	100

Cardiac catheterization with selective cineangiocardiography was done in 63 cases. All infants who had been in heart failure or who presented an unfavorable clinical picture were catheterized. Except for two patients with vascular rings, all surgical cases were catheterized pre-operatively.

In a series of 71 infants in whom a definitive diagnosis was made, there were at least 39 categories of diagnosis. Ventricular septal defect (alone, or associated with other cardiac defects) was the most common anomaly, being present in 24 of the 69 confirmed diagnoses. The 97 infants who were followed are divided into three groups (Table II). Twenty-six died without surgery; 38 are being followed without surgery; and 33 had 37 surgical procedures.

* This work was supported in part by the John A. Hartford Foundation, Inc., the Essex County Heart Association, Inc., and the New Jersey Heart Association. Dr. Poulos is Associate Professor of Surgery at the New Jersey College of Medicine, and Attending Thoracic and Cardiovascular Surgeon at Babies Hospital in Newark.

† The co-authors are: Elizabeth Johnson, M.D. of the Cardiac Catheterization Laboratory at United Hospitals; John H. Donnelly, M.D. also of that Laboratory; and Milton Prystowsky, M.D., Jose Antillon, M.D., and Anita Falla, M.D., all from the Babies Hospital in Newark.

TABLE II
CLASSIFICATION OF THE INFANTS AND CATHETERIZATION DATA

Category	Cardiac Cath.	No Cardiac Cath.	Total
1. Died without surgery	13	13	26
2. Followed medically	19	19	38
3. Surgery	31	2	33
4. Lost to follow-up	0	3	3
Total	63	37	100

Of those who died without surgical procedures, one infant was 8 months and another 7 months old. The remaining 24 babies varied in age from 2 hours to 6 months (mean 2.6 months). Autopsy was done on 19, or 73 per cent. Of the 26 infants, 14 [54 per cent] had cardiac anomalies for which corrective or palliative surgery might have been done.

The medical management of these infants was presented[2], and the medical aspects of this series of cases forms the basis of another report.

The 33 surgical patients ranged in age from 5 days to 23 months, average 5.8 months, and ranged in weight from 5 to 21 pounds. Average weight was 11 pounds, 8 ounces. There were no exploratory thoracotomies. All patients had cardiac catheterization preoperatively, except two infants with vascular rings. No patient was denied operation because of poor clinical condition. Four infants required a second operation.

Surgical Management

A summary of the 37 surgical procedures done on 33 infants is given in Table III. In general, standard surgical procedures were used, with the following exceptions. For infants with preductal coarctation of the aorta, the left subclavian artery was used to by-pass the coarctation and the ductus was not closed (if the ductus was large, it was constricted). Pulmonary stenosis was treated by transventricular valvulotomy. In one child with total anomalous pulmonary venous drainage, an atrial septal defect was created by inserting the fifth finger through a purse-string suture placed in the right atrium and finger-fracturing the patent foramen ovale. Ventricular septal defects were treated by pulmonary artery banding. However, one infant also required a concomitant right middle lobectomy for lobar emphysema, and two patients needed closure of a patent ductus arteriosus. A "miscellaneous" case had a double outlet right ventricle, and pulmonary valve and main pulmonary artery atresia, for which a superior vena cava to the right pulmonary artery anastomosis was done. Of the four infants requiring a second operative procedure, one had a middle lobectomy plus pulmonary artery banding, and one month later required further banding of the pulmonary artery. The second infant with tricuspid atresia had a Potts procedure. Eighteen months later, the superior vena cava was anastomosed to the right pulmonary artery. The third infant had pulmonary valve plus main pulmonary artery atresia and required a right sided Blalock-Taussig procedure seven days after a Potts operation. This was the only patient *not* to survive multiple operations. The fourth patient had pulmonary valve atresia plus a patent ductus arteriosus. The initial procedure was a transventricular pulmonary valvulotomy. Seven days later, the ductus required closure and a transventricular pulmonary valvulotomy was again performed.

Analysis of Surgical Deaths (Table III)

Possibly, 11 of the 14 postoperative deaths were avoidable if the following steps had been taken: (1) earlier diagnostic and surgical intervention; (2) meticulous early and late postoperative care; (3) diagnostic and technical errors avoided; and (4) operative procedures improved, such as the use of a special arterial punch for creating atrial septal defects.[4] Thus, 30 infants instead of 19 might have been late survivors. Then, the theoretical survival rate could have been 30 in 33, or 91 per cent. *This supposition is further substantiated by the fact that only one infant has been lost in the last 12 operations (survival rate: 91.5 per cent).*

Comment

Of 100 consecutive infants referred for evaluation and treatment, 26 died without surgery, and 33 had 37 surgical procedures. Of the 26 infants, a little more than half had cardiac

TABLE III
SUMMARY OF 37 SURGICAL PROCEDURES IN 33 PATIENTS

Anomaly	Number of Patients	Hospital Deaths	Late Deaths	Autopsies	Theoretically Avoidable Deaths
Patent ductus arteriosus[a]	5	0	0	0	0
Pre-ductal coarctation	2	0	0	0	0
Vascular rings[b]	3	1	1	2	2
Total anomalous pulmonary venous drainage[c]	3	3	0	3	2
Pulmonary valve atresia	2	1	0	0	0
Pulmonary stenosis[d]	2	1	0	0	1
Transposition great vessels[e]	3	1	2	2	3
Tetralogy of Fallot	3	0	0	0	0
Ventricular septal defects[f]	7	2	0	2	2
Tricuspid atresia	2	1	0	1	1
Miscellaneous	1	1	0	1	0
Total	33	11 (33%)	3 (9%)	11 (79%)	11

	Number		Per cent
Operative Deaths (on table)	= 1	or	3
Surgical Deaths (less than 30 days)	= 10	or	30
Late Deaths (more than 30 days)	= 3	or	9
Overall Survival Rate	= 19	or	58
Theoretical Survival Rate	= 30	or	91

(a) 2 isolated; 1 with pulmonic stenosis; 1 with atrial septal defect; 1 with ventricular septal defect.
(b) 1 each: double arch; anomalous right subclavian; right arch with left ligamentum arteriosum.
(c) 2 intracardiac; 1 supracardiac.
(d) 1 isolated; 1 with ventricular septal defect.
(e) 1 with ventricular septal defect and patent ductus; 1 with ventricular septal defect; 1 without ventricular septal defect.
(f) 3 isolated; 3 with patent ductus; 1 with middle lobe emphysema.

anomalies which were amenable to surgery. Average age of *this* group was 2.6 months. The average age of the 33 surgical patients was 5.8 months, which would indicate a delay in referring patients for evaluation or treatment. This suggests that there is a group of seriously ill infants who must be evaluated and treated before the appearance of the terminal signs and symptoms of heart failure and hypoxemia. When the average age of the surgical patients becomes the same or less than the average age of the infants who die without surgery, then one can expect the optimal salvage rate. Therefore, instead of 33, there could have been 47 infants referred for surgery and, ideally, 91 per cent (or 43 children) could have been saved, instead of only 19. In other words, it is possible to double the survival rate if patients are referred for surgical therapy *before* their terminal illness and if the previously mentioned diagnostic, operative, and postoperative procedures are corrected or improved.

These ill infants can best be brought to surgery after cardiac catheterization with selective cineangiocardiography.[2] A sick infant with congenital heart disease should have, at least, a selective cineangiocardiogram of the left atrium and right ventricle. When this was done, the post-catheterization diagnosis was *never* incorrect. Furthermore, in comparing the pre-catheterization diagnosis with the post-catheterization diagnosis in the 33 surgical patients, it was found that in 15 cases, the diagnosis was either completed, improved, or corrected. Knowing the exact diagnosis is of great importance to the surgeon, because surgical procedures can then be planned with confidence. Moreover, if after an initial operation the patient is not doing well, a second surgical procedure can be devised. In our series, four infants had a second operation and three of them were saved. It would have been difficult to plan another operation without an exact knowledge of the anatomic defects. In deciding the advisability of a second surgical procedure, an aggressive approach is mandatory. When there is little or no clinical improvement, we advocate the consideration of additional surgical procedures, and then, we do not hesitate to repeat cardiac catheterization, if the diagnosis is in doubt.

Our early surgical survival rate of 67 per cent compares well with that reported by others: Cooley and Hallman[3] 73 per cent; Sterns, Bitash, and Lillihei[5] 68 per cent; Therkelsen[6] 66 per cent; Gerbode, O'Brien, Kerth, and Robinson[7] 79 per cent; Zerbini, Verginelli, Bitencourt, *et al*[8] 73 per cent. Late surgical survival rates cannot be compared because they are not given in all groups. It should be noted that *only surgical cases are mentioned in the other reports* and for this reason the case material cannot be compared. However, the surgical cases can be compared on the basis of the patent ductus cases to total surgical cases ratio (PDA/total).

In this series, the PDA/total ratio is 5/33, or 15 per cent. The calculated ratio in the published reports is as follows: Cooley and Hallman[3] 19.4 per cent; Therkelsen[6] 25 per cent, Zerbini, *et al*[8] 31.5 per cent, Sterns, *et al*[5] 33 per cent, and Gerbode, *et al*[7] 37 per cent. On the basis of our study, it would seem reasonable to state that the number of infants who die without the benefit of surgery is proportional to the PDA/total ratio. The greater the ratio, the greater the number of cases *not* being referred for surgery, if one assumes that the incidence and types of congenital heart disease are the same in different countries. A large ratio may mean that the ill infant is being watched too long; or that there is delay in establishing the diagnosis; or there should be better coordination between the medical and surgical services; or there is a serious delay in recognizing the gravity of the cardiac status. On the other hand, a small ratio would indicate that the medical-surgical team is aggressive in treating the very sick infant with heart disease.

Summary

In a consecutive series of 100 sick infants with congenital heart disease, 26 died without surgery, 38 are being followed without surgery, and 33 had 37 operations. In the group that died without surgery, 54 per cent had cardiac anomalies amenable to surgery. The early surgical survival rate was 67 per cent, the late survival rate 58 per cent, and the theoretical survival rate 91 per cent. There is a group of infants who must be evaluated and treated before the onset of the terminal events of heart failure and hypoxemic spells, if the overall survival rate is to be improved. The minimal preoperative studies should include a selective cineangiocardiogram of the left atrium and right ventricle. If the diagnosis is in doubt, catheterization should be repeated, either before the first, or second operation. The ratio of the patent ductus patients to the total surgical group is an indication of the number of patients who die without the benefit of surgery.

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Bibliography

1. Abbott, M.: *Atlas of Congenital Cardiac Disease,* New York, American Heart Association, 1936.

2. Poulos, P. P., Johnson, E., Prystowsky, M., and Donnelly, J. H.: JAMA 189:667 (August 31) 1964.

3. Cooley, D. A. and Hallman, G. L.: J. Cardiov. Surgery, 5:584 (December 1964)

4. Poulos, P. P.: "A New Method and Instrument for Creating Atrial Septal Defect" — *In press.*

5. Stearns, L. P., Bitash, A. F., Lillihei, C. W.: America Journal of Cardiol. 13:153 (1964)

6. Therkelsen, F.: Journal of Cardiov. Surg. 5:619 (December 1964)

7. Gerbode, F., O'Brien, M. F., Kerth, W. J., Robinson, S. J.: Journal of Cardiov. Surg. 5:591 (December 1964)

8. Zerbini, E. J., Verginelli, G., Bitencourt, D., Jatone, A., Kaplan, M., Gembrini, P., Maura Campos, C.: J. Cardiov. Surg. 5:608 (December 1964)

27 South Ninth Street

Another in the series of articles for the practitioner, prepared by the New Jersey Society of Clinical Pathologists. Dr. Gambino is Director of Laboratories at the Englewood Hospital.

Is My Patient Anemic?

S. Raymond Gambino, M.D.
Englewood Cliffs

The physician skilled in physical diagnosis and history taking knows just where to look and what to ask. He does not examine his patient in all possible modes nor does he ask all possible questions. Instead he is highly selective. He uses only those diagnostic technics (and asks those questions) that will be most productive.

The physician skilled in the use of the laboratory will apply a similar philosophy. He will not be deluded into thinking that "more is better." He will stop and reflect before ordering a routine battery of laboratory tests such as:

Hemoglobin	Platelet Count
Hematocrit	Differential Count
Red Blood Count	Red Cell Indices
White Blood Count	

Instead of ordering a battery of specific tests it would be far better to ask the laboratory a simple question, "Is my patient anemic?"

The question can be answered by one test: hemoglobin.

Why Hemoglobin

Oxygen is carried by hemoglobin, and hemoglobin concentration is the best laboratory indicator of anemia. In the past, however, hemoglobin measurements were not as accurate as measurements of red cell numbers or hematocrit. At the turn of the century the best test for detecting anemia was the red blood cell count. In the 1930's Maxwell Wintrobe demonstrated the superiority of hematocrit determinations. The hematocrit is an accurate test but it is not easily automated.

During the past 10 years, however, an international standard for hemoglobin has been established. Highly accurate methods of measuring hemoglobin using semiautomated or fully automated equipment have been developed. Today it is possible for the hemoglobin measurement to be the most accurate test in the laboratory.

Normal Values

Normal values for hemoglobin concentration vary with sex and age. But a simple rule-of-thumb applicable to adolescents and adults is that any woman with a hemoglobin below 12 Grams* may be anemic; any man with a hemoglobin below 13.5 Grams* may be anemic. Normal men may have hemoglobin values as high as 16.5 or even 17 Grams.*

Why Not Hematocrit?

Some physicians order hemoglobin and hematocrit as a single test. This is not necessary, is sometimes dangerous, and is always wasteful of a technologist's time. It is not necessary because the accurate measurement of hemoglobin is the best single test for the detection of anemia. With modern equipment, accurate measurements of hemoglobin are simple. The measurement of hematocrit is sometimes dangerous because the hematocrit will be grossly incorrect if the collection tubes are only *partly filled*. This error is caused by the osmotic effect of the anticoagulant. The routine combination of hemoglobin and hematocrit is wasteful of a technologist's time because it gives redundant data. Eliminating the hematocrit as a routine test frees time for more productive work in the hematology laboratory. It also permits a significant price reduction for the routine screen.

* Per 100 milliliters

Some physicians believe that the combination is needed as a check on the hemoglobin. My answer is that the primary measurement of hemoglobin *can* and *should be,* and *is* done correctly. The high accuracy of cyanmethemoglobin measurements in hospital laboratories was demonstrated in the 1965 survey by the College of American Pathologists. Ninety-five per cent of the 895 laboratories tested came within one Gram* of the assigned value. *No other laboratory test was that accurate.* Finally, in most laboratories the hemoglobin and hematocrit are performed on the same sample; therefore, the combination of the two measurements does not avoid sampling or labeling errors.

Sometimes, however, hematocrit may be preferable to hemoglobin. For example, in an emergency room or recovery room it may be simpler and faster to monitor blood loss using microhematocrit equipment rather than sending samples back to the laboratory. But even in the emergency room, recovery room, or blood bank, the microhematocrit is not really superior to hemoglobin. The American Optical Hand Hemoglobinometer will give results as accurate as the microhematocrit, at less cost, in less time, and without noise.

Preferred Methods for Measuring Hemoglobin

The best way to measure hemoglobin is as cyanmethemoglobin or oxyhemoglobin using accurate diluting equipment and an electric colorimeter or spectrophotometer. Acid and alkaline pigments (e.g., Sahli or Haden-Hausser) are not recommended. The American Optical Hand Hemoglobinometer measures oxyhemoglobin with a green filter and is quite accurate. It is, in fact, probably the best system for field or office use. The table below summarizes recommended and non-recommended methods for measuring hemoglobin.

Methods for Measuring Hemoglobin

Recommended

1. Cyanmethemoglobin using an electric colorimeter or spectrophotometer.
2. Oxyhemoglobin using an electric colorimeter or spectrophotometer.
3. Oxyhemoglobin using the American Optical Hand Hemoglobin Meter (HB Meter).

Not Recommended

1. Acid or alkaline hematin. (e.g., Sahli and Haden-Hausser methods).
2. Examination of mucous membranes.

Sampling

Venous samples are superior to capillary samples because venous samples have less than half the sampling variability of capillary samples. The effect of posture on hemoglobin (or hematocrit) should not be forgotten. When a patient stands, the hydrostatic pressure in the lower half of his body causes mild to moderate hemoconcentration. The transfer of water from the blood space to the intracellular space raises hemoglobin by from 0.5 to 1.5 Grams.* When the patient lies down, the water comes back from the intracellular space and rehydrates the blood space, thereby decreasing the hemoglobin concentration. This physiologic effect explains why clinic or office hemoglobin values may not be the same as hemoglobin values obtained after 30 or more minutes in bed. The posture effect is most pronounced in patients with cardiovascular failure.

Precision

There is no such thing as an absolutely perfect test. Hemoglobin measurements are the most accurate and precise measurements made in the laboratory, but they do show a *minimum* and *unavoidable* variability. This irreducible variability is such that in 1966 the best cyanmethemoglobin procedure will give values ranging between 14.6 and 15.4 Grams* when the "true" value is 15 Grams.* For two consecutive hemoglobin values to be *significantly* different, they must differ by more than 0.8 Grams.* Do not try to interpret very small changes in hemoglobin (or for that matter in hematocrit).

Conclusion

The measurement of hemoglobin is the best single test for detecting anemia. It is not necessary and is indeed wasteful of the technologist's time to combine hemoglobin and hematocrit as a routine.

11 Carol Drive

A psychiatrist to our criminal courts here offers an objective yardstick for an often too-subjective evaluation.

The Hostility Index

An Objective Measure Of Psycho-Aggressiveness

Samuel R. Kesselman, M.D./Newark

The doctor is often asked to estimate a person's basic hostility. The tendency is to do this by intuition, hunch, or mystique. Actually, the quality may be weighed with reasonable objectivity.

Remember that hostility may be turned outward or inward. If it is "extra-jected," we see it in the form of acting out toward another person, as in homicide or assault. But, hostility may also be intra-jected in the form of suicide or masochistic gesturing. If the basic drive is toward an outward manifestation of hostility, and if it simply cannot be extra-jected, it will be turned inward. Conversely, if a basic inward hostility is frustrated (as, for instance, in thwarting a suicide gesture), the individual may express his hostility outwardly in terms of violent rage or single or multiple homicides. A psychiatric evaluation of the degree of unresolved hostility in a patient or defendant becomes meaningful when the decision has to be made as to whether an individual is suitable to be released to the community. Here the question is: Does he represent a threat to himself or others? The hostility factor which we here call the *hostility* (psycho-aggressive) *index* has practical value in the following situations:

(1) If a patient or inmate is transferred from one institution to another, a knowledge of the degree of dangerousness he represents is helpful to the personnel of the receiving institution in managing and treating their new charge.

(2) A knowledge of the degree of dangerousness aids the parole officer in supervising a parolee, and helps the doctors seeing him on the "outside."

(3) A knowledge of the degree of dangerousness of an inmate in a correctional institution or a patient in a psychiatric ward is meaningful to the classification committee, therapist, superintendent, physician, warden, or medical director in managing the institutional life of the patient or inmate, and in evaluating prognosis—a vital datum to the Parole Board or staff committee.

(4) A knowledge of the degree of threat to others is useful to judges in evaluating the offender and in rendering sentence. The psychiatrist who examines criminal suspects, inmates of institutions, or patients in a clinic or ward is frequently asked to offer an opinion about the degree of harm the person represents to himself ("suicidal potential") or the degree of harm the person represents to others ("assaultive potential"). Generally, psychiatrists deal with this subject in similar fashion; but their terminology will differ. The official or agency receiving several psychiatric reports is left confused by what appears to be, not only differences in diagnosis and formulation, but differences in terminology. Somehow, we have to develop a universal scale and a consistent terminology, so that a lay official or agency receiving a report about a hostile subject can get a clear idea of the degree of threat or dangerousness the individual represents to himself or others. In my experience as psychiatric consultant in "correction," on municipal, county, state, and federal levels, I have developed a yardstick which I call the Hostility Index. It is a "psycho-aggressive" scale. This index will satisfy the criteria above listed. I have used this classification for over five years. At first, the psycho-aggressive impulse was broken down into (a) suicidal and (b) homicidal components. The degree of each component was then described as *minimal, mild, moderate,* or *severe.* It soon became apparent to me and to the classification committee at Bordentown Reformatory that the use of the term *homicidal* created a problem. A person so stigmatized would represent a threat to any population. Now the classification is divided into (A) suicidal and (B) assaultive. A similar problem then developed with the word *suicidal.* Durthe last year, I have adopted the following breakdown of the hostility (psycho-aggressive) impulse:

(A) Masochistic (self-destructive) — Under masochistic the following subdivisions are used:

(1) masochistic — minimal (unlikely suicidal risk) . . . By minimal is meant that the individual rarely if ever had any suicidal rumination and never resorted to suicidal gesturing.

(2) masochistic — mild (latent suicidal risk) . . . The word "mild" applies to the individual who has had suicidal ideas but never resorted to suicidal gesturing.

(3) masochistic — moderate (potential suicidal risk) . . . By moderate is meant that the subject has had suicidal ideas, has restorted to suicidal gesturing in the past, but is not resorting to any suicidal rumination or gesturing at the present time.

(4) masochistic — severe (active suicidal risk) . . . "Severe" describes the subject who is currently overwhelmed by suicidal preoccupation and represents an active suicidal risk.

(a) masochistic (self-destructive) gestures: by gas; by hanging; by mutilation (slashing, shooting); by medication; by other means.

(B) Sadistic (assaultive) — Under this category we have:

(1) sadistic (assaultive) — minimal (unlikely assaultive risk) . . . By minimal is meant that the individual rarely if ever had any assaultive rumination and never resorted to assaultive behavior.

(2) sadistic (assaultive) — mild (latent assaultive risk) . . . "Mild" applies to the subject who has had assaultive ideas, but never acted out any assaults.

(3) sadistic (assaultive) — moderate (potential assaultive risk) . . . "Moderate" describes the individual who has had assaultive ideas and acted out assaults in the past, but is not resorting to any assaultive rumination or acting out assaultively at the present time.

(4) sadistic (assaultive) — severe (active homicidal risk) . . . By "severe" is meant that the individual is overwhelmed with assaultive rumination at the present time, and that he is threatening violence at the present time, representing a homicidal risk.

(a) sadistic (assaultive) gestures: with a deadly weapon; strangling; stabbing; shooting; other means.

This classification is currently being used in my reports to the classification committee at Bordentown Reformatory and the State Prison. It is also used in my communications to the State Parole Board; in reports done at the Essex County Penitentiary; and in communications to prosecutors and defense attorneys. A diagnosis is made, and under the diagnosis, the following evaluation is offered:

(A) Masochistic (or "self-destructive") tendency: how many masochistic gestures? Brief descriptions of these gestures, with adjective evaluation: minimal, mild, moderate, or severe.

(B) Sadistic (or "assaultive") tendency: how many of these aggressive gestures? Brief descriptions of them, with adjective evaluation: minimal, mild, moderate, or severe.

There is certainly widespread need for some such formula: for criteria that are consistent, sensible, and objective. I offer this hostility index as, at least, a start toward a universally acceptable scale and vocabulary in reporting on psycho-aggressive impulses. Any suggestions for sharpening the scale are certainly welcomed.

949 Broad Street

RADIATION IN THYROID CANCER

The study is concerned with cases of 58 patients who received external radiation therapy for control of thyroid cancer which was not resectable because of type of extension and invasion. Five of nine patients given radiation therapy for papillary carcinoma have survived from five to 25 years without recurrence and 12 with probable microscopic persistent papillary cancer have had no recurrence over periods of six to ten years. Of eight patients with follicular carcinoma treated five years ago, there has been no local recurrence in six. Three of seven patients observed ten years or more are without recurrence after 10, 16, and 18 years. One of seven patients with anaplastic carcinoma was without local recurrence for six years; another has been free of disease for two years and a third had recurrence after three years. Five patients with giant cell carcinoma died within two months. Three of six patients with lymphosarcoma limited to the thyroid were without evidence of lymphoma for periods of 3, 17, and 20 years.

G. E. Sheline, M. Galante, and S. Lindsay
Amer J Roentgen 97:923 (Aug) 1966

A recognizable but rare syndrome — with good treatment results — is here described by Dr. Deraney.

Diaphragmatic Flutter

Maurice F. Deraney, M.D./Ridgewood*

Diaphragmatic flutter creates a kind of distress that cannot be forgotten once it is observed by a physician. It should be distinguished from paroxysmal ventricular tachycardia, angina pectoris, and such other disorders as myocardial infarction, dissecting aortic aneurysm, and pulmonary embolism. Fifty-three cases of this rare complex have been described so far in the medical literature. Leuwenhoek,[1] in 1723, described the first patient — himself — with this syndrome in a letter to a friend. He "had been disturbed for three days by strong pulsations in the epigastric area which his doctor had diagnosed as palpitations of the heart." Nevertheless, after counting his arterial pulsations and observing that they were regular and slower than the epigastric movements, Leuwenhoek concluded that the epigastric beats had their origin in the diaphragm. Since then, numerous studies of this disturbance of diaphragmatic motility have appeared with descriptions of the results of pulmonary function studies, as well as characteristic phonocardiographic and electrocardiographic findings.

A 61 year old woman with a history of rheumatic fever at the age of 11, and known enlarged heart attributed to rheumatic heart disease, presented a ten year history of attacks described as follows: She rather suddenly experienced a choking sensation, became acutely dyspneic and was aware of rapid involuntary movements at the level of the diaphragm. She then became air hungry and felt as if her diaphragm was "stuck way up." Within five or ten minutes, this relaxed. She would then eructate and almost invariably lost part of the preceding meal. This experience left her completely exhausted. The attacks occurred with a frequency of once every two to three weeks.

Numerous studies had been done, including several gastrointestinal series, esophograms, chest roentgenograms, and electrocardiograms. There was one bronchoscopy for hemoptysis. The only diagnosis had been that of rheumatic heart disease. No studies had been made during one of the episodes. Although the patient was tense and anxious, no direct relationship between the episodes and emotional trauma was found. No "cause and effect" connection could be determined between the attacks and dietary abuse; nor was there any relationship to meals, time of day, or position.

No significant symptomotology could be elicited on detailed system review except in relation to the acute attacks. There had been no symptoms suggestive of congestive failure at any time. There had been some hemoptysis, but it could not be related to far advanced rheumatic heart disease with marked left atrial enlargement, nor to pulmonary hypertension.

She was a well developed and well nourished anxious female with a pulse of 80, blood pressure of 110/80, and a respiratory rate of 14. There was no cyanosis, edema, or lymph node enlargement. Examination of the head and neck was unremarkable. The lungs were clear to percussion and auscultation. The heart rhythm was regular. Point of maximum impulse was felt in the sixth intercostal space at the mid-clavicular line. There was a Grade I apical systolic murmur transmitted to the left axilla. No other abnormalities were detected.

Urinalysis, hemogram, erythrocyte, and sedimentation rate were all within normal limits. The electrocardiogam showed nothing suggestive of "strain," atrial or ventricular hypertrophy, or arrhythmia. Upon introduction into the fluoroscopy room, most fortuitously, she suddenly developed the respiratory distress. She was immediately placed behind a fluoroscopic screen. One could distinctly visualize a rapid, fine symmetrical tremor of both hemi-diaphragms. The lungs were clear and the left cardiac border showed the typical "straightening" characteristic of mitral valvular disease. The heart size was borderline. No left atrial double contour shadow could be seen. Due to marked anxiety and breathlessness the examination was discontinued and the patient was given 50 milligrams of chlordiazepoxide hydrochloride (Librium)® intramuscularly and allowed to rest. Within fifteen minutes, she felt greatly relieved. Following this espisode, the patient was placed on diazepam (Valium®) — 15 milligrams a day — with no recurrence of the episode in the ensuing three months of observation to date.

In most cases of diaphragmatic flutter, no clear cut etiologic mechanism could be made out. Dressler and Kleinfeld[2] cited two cases in which a markedly enlarged heart due to rheumatic heart disease was present. Subsequently, Dressler, Dedulin, and Schub[3] reported on another two cases of known rheu-

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matic disease; they concluded that active rheumatic fever may be one of the factors which accounts for the development of diaphragmatic flutter. It was their opinion that the cases reported by Nazzi and Duchera,[4] and independently by Emerson,[5] all represented flutter secondary to active rheumatic fever.

Apparently the flutter may be produced by excitation of the phrenic nerve, or by irritation of the diaphragm itself. Abnormal *excitation* of the phrenic nerve may be due to disturbances of the central nervous system or to irritating factors anywhere along the path of that nerve. Section of the phrenic nerve abolishes flutter in all instances. The most common central nervous system cause of diaphragmatic flutter is epidemic encephalitis. This explained the cause of the flutter in eight of the cases reported by Rigatto and de Medeiros.[6] The flutter appeared as early as four days after the beginning of encephalitis in one case, and as long as four months later in another. An emotional origin has been suggested in some cases; indeed, in most of the patients described in the literature a strong neurotic component was observed. Different peripheral sources of irritation of the phrenic nerve producing diaphragmatic flutter have been described: a cervical rib, enlarged mediastinal lymph nodes, pleurisy, peritoneal adhesions, and fractured xiphoid process. In two cases, the heart beat appeared to be the excitatory factor acting on the phrenic nerve. The flutter in these cases, was synchronous with the heart beat and limited to the left hemidiaphragm. In both, tetani and metabolic alkalosis, consequent to copious vomiting, were present. A metabolic disturbance lowering the threshold of stimulation of the phrenic nerve was suggested as the cause, thereby rendering the phrenic nerve sensitive to cardiac stimuli.

Irritation of the diaphragm itself has been suggested as the mechanism of diaphragmatic flutter. Harris and Scherf[7] described a case in which the flutter movements were restricted to a limited area of the right hemidiaphragm. The flutter did not disappear after successful blocking of the right phrenic nerve but the movements were slowed down by the administration of quinidine. Harris and Scherf[7] suggested that local ischemia of the diaphragmatic muscle could be rendering the affected area abnormally sensitive to physiologic stimuli. In cases of pleurisy and peritonitis which are accompanied by diaphragmatic flutter, Harris and Scherf thought that changes in the diaphragmatic muscle itself could play a central role in the etiology of flutter.[7] Harvey[8] observed diaphragmatic flutter in an elderly diabetic in whom the flutter became manifest only during the period of preterminal coma.

Disturbances in diaphragmatic motility can be divided into two groups: clonic or tonic contractions. Clonic contractions occur in singultus and diaphragmatic flutter. Tonic contractions are seen in tetanus, rabies and, strychnine poisoning. Diaphragmatic flutter is usually distinguished from persistent singultus by the higher frequency of the diaphragmatic contractions and by the absence of the respiratory sound due to insufficient or nonsynchronous opening of the glottis observed in singultus.

The rate of the abnormal diaphragmatic contractions varies from 35 to 480 contractions per minute. The contractions are almost invariably irregular except when synchronous with the heart, in rare cases. The amplitude of the contractions may vary even in the same patient. The force of contractions also varies widely. Sometimes they are large enough to transmit visible movements to the epigastric area, the lower intercostal spaces or even the whole abdominal wall.

In most cases, the respiratory rate was unaffected by the diaphragmatic flutter. In these instances, the flutter movements were apparently superimposed upon normal diaphragmatic excursions. However, in several cases, tachypnea was noted. In some cases the respiratory rate, although abnormally high, was lower than the flutter rate. In six patients described by Rigatto and de Medeiros,[6] the flutter movements apparently substituted for the respiratory movements, and in two of these cases hyperventilation and respiratory alkalosis occurred.

Ting, Karliner, and Williams[9] described one patient with what was called "apneustic respiration." This type of breathing is characterized by a sustained inspiration, lasting from seconds to minutes, and by an expiration consisting of brief interruptions of the sustained inspiration.

Emotional tension and excitement were the most common precipitating factors. Cough, deep breathing, deep expiration, pressure on the upper half of the abdomen, eating, exercise, and sneezing also induce attacks of diaphragmatic flutter in some patients. In the case cited by Bird[10] the flutter paroxysms could be started by "a push-the-button maneuver;" i.e., pressing on a fractured xiphoid process. Fox[11] described a patient in whom pressure over a dental cyst would start the flutter. Swallowing of water was an efficient precipitating factor in the patient reported by Rigatto and de Madeiros.[6] In only a few instances were maneuvers capable of suppressing the paroxysm described: deep inspiration, swallowing, pressure over the supraclavicular area. Breath holding was consistently ineffective. In most patients the paroxysms ceased during sleep, but in several the paroxysms occurred during sleep also; moreover, there was one case in which the paroxysms occurred only when the patient was asleep.

The clinical picture is primarily one of respiratory distress sometimes with muscular pain in the abdominal wall or epigastric region, or in the precordium simulating angina pectoris or myocardial infarction or pericarditis. Palpitation was less frequent. The most common physical findings in these cases were paroxysmal beats of the abdominal wall especially in the epigastric region or the lower intercostal spaces unrelated to the heart beat; tachypnea of variable degrees; and peculiar sounds during auscultation of the precordium, epigastrium and lower costal border. The sounds detected in several cases over the chest wall, especially the precordium and lower costal border, have been described as louder, clearer, and different in rhythm from the heart sounds. A vivid description was given by Levine and Harvey[12] ". . . it seemed that one was listening to two different hearts within the chest." These characteristics of the diaphragmatic flutter may lead to confusion with atrial fibrillation. In some cases, the abnormal sounds were described as a "to and fro shuffling" or a "to and fro type of murmur — medium-pitched, rough, and rustling." Others have confused the flutter sounds with pericardial friction rub. Over the epigastric area, this sound may imitate a splashing noise produced by shaking the stomach contents. This is occasionally heard by the patient, more rarely by the examiner at a distance.

Fluoroscopy is one of the most effective methods for making the diagnosis. It not only allows establishment of the diagnosis but also the determination of the extent of diaphragmatic involvement, and the amplitude of the diaphragmatic contractions. The phonocardiographic record of diaphragmatic flutter sounds constitutes one of the most objective documentations of its presence. Typical phonocardiographic tracings illustrate several of the cases of diaphragmatic flutter reported in the literature. Electrocardiography is usually unrevealing. In a few cases, alterations of the S-T segment and P wave occurred during the paroxysm. This occasionally strongly suggests myocardial ischemia.

The clinical course is variable. A paroxysm of flutter may last from a few seconds to several months, in one instance. In most cases they were limited to seconds or minutes. The intervals between the paroxysms varied from two minutes to several months. The patient with the longest follow-up to date has been presenting paroxysms for thirteen years. The treatment includes elimination of the etiologic factor, when this can be identified, and when it is amenable to surgical or medical correction; blockade of the phrenic nerve when the cause of the flutter is not identified or, when identified, is not amenable to surgical or medical correction; and administration of drugs, psychological reassurance, and the like.

Our patient seems to have responded to diazepam therapy; she has been free for three con-

secutive months to date. Previously, episodes occurred with a maximum interval of three weeks. But since diaphragmatic flutter may subside spontaneously for variable lengths of time, the efficacy of this therapy is problematic but still well worth a trial.

Summary

A case of diaphragmatic flutter is presented, followed by a review of the clinical features of this rare but very interesting syndrome. Our patient appears to have responded, at least temporarily, to diazepam therapy. Further evaluation of the efficacy of this drug is warranted.

Bibliography

1. Leuwenhoek, A.: De Globulorum Sanguinerum Magnitudine. Philosophical Transactions, London, 32: 341 (May 1723)

2. Dressler, W. and Kleinfeld, M.: American Journal of Medicine, 16:61 (January 1954)

3. Dressler, W., Dedulin, V., and Schub, H.: Journal of the American Medical Association, 186:2 (July 1963)

4. Nazzi, V. and Duchera, L.: Minerva Cardioangiologica, Turin, Italy, 5:531 (June 1957)

5. Emerson, K.: Quoted by Rigatto and de Medeiros[6]

6. Rigatto, M. and de Medeiros, N.: American Journal of Medicine, 32:103 (January 1962)

7. Harris, R. and Scherf, D.: American Journal of the Medical Sciences, 210:598 (December 1945)

8. Harvey, W. P.: Quoted by Rigatto and de Medeiros[6]

9. Ting, E. Y., *et al.*: American Review of Respiratory Diseases, 88:833 (December 1963)

10. Bird, C. E.: Journal of the American Medical Association, 89:101 (February 1927)

11. Fox, H. A.: British Journal of Medicine, 1:153 (February 1898)

12. Levine, S. and Harvey, W.: *Clinical Auscultation of the Heart.* Philadelphia, 1959, Saunders. Page 546

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INFORMATION FOR READERS AND CONTRIBUTORS

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THE JOURNAL OF THE MEDICAL SOCIETY OF NEW JERSEY

P. O. Box 904, Trenton, New Jersey 08605

STATE ACTIVITIES

Trustees' Minutes

January 15, 1967

A regular meeting of the Board of Trustees was held on Sunday, January 15, 1967, at the Executive Offices. For further information, detailed minutes are on file with the Secretary of your component society. A summary of the significant actions follows:

Blue Cross Homemaker Project . . . Reaffirmed its previous action (reported in the January, 1967 issue of THE JOURNAL, pages 38 and 39) that it could not endorse this program because it seems to embody duplication of services; it places the physician in legal jeopardy by asking him to use personnel not authorized under the Medical Practice Act; it imposes upon the attending physician the responsibility for control of utilization; it foreshadows an increase in Blue Cross subscription expenditures; and it sets the levels of compensation for health care aides at a figure higher than that received by hospital personnel of similar competences.

Philadelphia Regional Library . . . Agreed that MSNJ has been committed to support the activities of the library facilities of the Academy of Medicine of New Jersey, and for this reason could not identify itself with the activities of the Philadelphia Regional Medical Library Committee, with whom the Society had been invited to participate.

Report of Treasurer . . . Concurred in the Audit Committee's approval of the recently completed audit of all accounts, as authorized by the Board at its November 20th meeting.

Letter of Commendation for Dr. Karel . . . Directed that a letter of commendation from the Union Township Civil Defense-Disaster Control Council, extolling the accomplishments of Jack R. Karel, M.D. of Hillside in the area of civil defense, be acknowledged with thanks; and that a copy be forwarded to Dr. Karel.

Council on Public Health . . . Approved the report of the January 4, 1967 meeting of the Council, including the following recommendations:

1. *Air Pollution Control* . . . That MSNJ record itself as encouraging and supporting all practicable measures to achieve the control of air pollutant densities at all times, but especially when dangerous index levels are reached.

2. *Child Safety Week* . . . That MSNJ petition the Governor to proclaim the first week of April as "Child Safety Week," and that a program of child safety be supported at the local level by the component societies, with appropriate publicity.

3. *Measles Vaccine* . . . That the Board of Trustees reaffirm its position in support of measles immunization.

4. *Little League Football Health Hazards* . . . That MSNJ approve the establishment of a subcommittee of the Committee on Child Health, to study the health hazards to young boys who participate in Little League football programs and to meet with the Football Officials Association in an attempt to establish standards for safe participation in Little League football.

5. *School Physicians* . . .

(A) That MSNJ record itself as disposed to encourage, and to consider co-sponsorship of a postgraduate course for school physicians, when a definite program is offered to school physicians and submitted to MSNJ by the Association of School Physicians.

(B) That MSNJ send a copy of "The Report of the Committee on School Health of the American Academy of Pediatrics" to the Com-

missioner of Education and recommend that he make copies available to all superintendents and school physicians. (Suggestion was also made that copies be made available to the four area dioceses.)

6. *1967 Eye Health Screening Program . . .* That the 11th Annual Eye Health Screening Program be held during the third week of September (17-23) 1967, in cooperation with the New Jersey Academy of Ophthalmology and Otolaryngology, the New Jersey State Department of Health, the New Jersey State Commission for the Blind, and the New Jersey Hospital Association.

7. *Correlation of Diabetes and Glaucoma . . .* That a program of screening for diabetes, under the auspices of the New Jersey State Department of Health and staffed by personnel of the Public Health Department, be included, on a pilot study basis, in a few selected screening centers in conjunction with the 1967 Eye Health Screening Program.

8. *Amblyopia Program . . .* That MSNJ grant its endorsement of the Amblyopia Program for the detection of amblyopia in the schools of New Jersey under the auspices and direction of the New Jersey Commission for the Blind.

9. *Maternal and Infant Welfare . . .* That the *Maternity Service Records* book for use in hospitals be approved in its revised format.

Institute For Medical Research . . . Endorsed the Institute for Medical Research at Camden, and directed that Governor Hughes be so notified. (This non-profit research institute is one of the country's leading centers of basic medical research on the cause of cancer. It is supported by grants from the federal government, voluntary agencies, and foundations — with supplementary funds contributed by the local community, industry, and individuals.)

Vacancy on the Council on Public Health . . . Agreed not to fill the vacancy on this Council, created by the resignation of Dr. Carl J. Records (1969), but to refer the matter to the 1967 House of Delegates.

Ad Hoc Study Committee on Revision of Constitution and By-Laws . . . Directed that the following recommendation be referred to the Standing Committee on Constitution and By-Laws, with the request that the necessary amendments be prepared for submission to the 1967 House of Delegates:

That each Judicial District be represented by two Trustees for a membership up to 1,000, and that each Judicial District be entitled to one additional Trustee for each additional 1,000 members or major fraction thereof.

. . . Agreed that the *ad hoc* committee had completed its assignment and directed that it be discharged with thanks as of this date (January 15, 1967).

Board of Medical Examiners . . . In accordance with the terms of the Medical Practice Act, nominated the following for submission to the Governor, to fill terms on the State Board of Medical Examiners which will expire on February 10, 1967:

Incumbent — F. Clyde Bowers, M.D., Mendham

Candidates — 1. F. Clyde Bowers, M.D., Mendham
2. Raymond A. Taylor, M.D., Toms River
3. Theodore K. Graham, M.D., Paterson

Incumbent — Vincent P. Butler, M.D., Jersey City

Candidates — 1. Vincent P. Butler, M.D., Jersey City
2. Irving R. Hayman, M.D., Paterson
3. Matthew E. Boylan, M.D., Jersey City

Incumbent — Lloyd A. Hamilton, M.D., Lambertville

Candidates — 1. Lloyd A. Hamilton, M.D., Lambertville
2. Raymond A. McCormack, M.D., Trenton
3. Charles Cunningham, M.D., Vineland

Incumbent — John J. McGuire, M.D., Newark
Candidates — 1. John J. McGuire, M.D., Newark
2. Leopold E. Thron, M.D., Paterson
3. Nicholas E. Marchione, M.D., Vineland

AMA Publications . . . Directed that responsibility for the requested review and report on two publications of the AMA — *Meeting the Challenge of Family Practice* and *The Graduate Education of Physicians* — be assigned to the Committee on Medical Education, with the request that a report with recommendations be presented to the Board.

MEDICARE-APPROVED EXTENDED CARE FACILITIES

As of February 1, 1967, the following extended care facilities in New Jersey have been approved for Medicare beneficiaries:

ATLANTIC
Beachview Nursing and Convalescent Home, Rhode Island Avenue at the Boardwalk, Atlantic City
Golden Crest Nursing Home, 29-33 North Vermont Avenue, Atlantic City
Linwood Convalescent Center, New Road and Central Avenue, Linwood

BERGEN
Bergen Pines Hospital, Ridgewood Road, Paramus
Cliff House, 633 Palisade Avenue, Englewood Cliffs
Teaneck Nursing Home, 1104 Teaneck Road, Teaneck

BURLINGTON
Cinnaminson Manor Nursing and Convalescent Center, 1700 Wynwood Drive, Cinnaminson
Crestview Nursing Home, Kresson and Eveshon Roads, Marlton
Greenleaf Extension Nursing Home, 28 East Main Street, Moorestown
Lake Wood House, Sunset Road, Burlington
Laurelview East, Box 87, Mount Laurel
Lutheran Home, 255 East Main Stret, Moorestown
Moorestown Nursing Home, Second and Pantcoast Streets, Moorestown

CAMDEN
Cherry Hill Hospital Nursing Home, 1412 Marlton Pike, Cherry Hill
Laurelview, North Park Drive, Pennsauken
Stratford Nursing and Convalescent Center, Laurel and Warwick Roads, Stratford

CAPE MAY
Lutheran Home at Ocean View, 184 Shore Road, Route 9, Ocean View

CUMBERLAND
Rainbow Convalescent Center, R.D. 6, Big Oak Road, Bridgeton

ESSEX
Daughters of Israel, 1155 Pleasant Valley Way, West Orange
Theresa Grotta Center, 189 Mountain Avenue, Caldwell
Hartwyck, Lindsley Road and Pompton Avenue, Cedar Grove
Newark Gardens, 70 Newton Street, Newark
Redwood Manor Nursing Home, 1 Summit Avenue, West Orange

GLOUCESTER
Greenbriar Nursing and Convalescent Center, 190 North Evergreen Avenue, Woodbury
Pine Crest, P.O. 146, Sewell

HUDSON
Palisade Nursing Home, 68-19 Boulevard East, Guttenberg

MERCER
Meadow Lakes Nursing Home, Hightstown
Merwick (Unit of Princeton Hospital), 79 Bayard Lane, Princeton

MIDDLESEX
Edison Lodge, 465 Plainfield Avenue, Edison
Oak View Nursing Home, Ernston Road and Garden State Parkway, Morgan
Roosevelt Hospital, Metuchen

MONMOUTH
Emery Manor, Highway 34, Matawan
Monmouth Convalescent Center, 229 Bath Ave., Long Branch
Montgomery Medical Home, Dutch Lane Road, Freehold

MORRIS
Hill Top House, Hook Mountain Road, Pine Brook
Lincoln Park Nursing Home, 521 Pine Brook Road, Lincoln Park
Troy Hills House, 200 Reynolds Avenue, Parsippany

OCEAN
Country Manor Nursing Home, 16 Whitesville Road, Toms River
Pinehaven Nursing Home, Bayville
Summit Convalescent and Nursing Home, 285 River Avenue, Lakewood

PASSAIC
Daughters of Miriam Home, 155 Hazel Street, Clifton
Preakness Hospital (Unit #1), Paterson

SOMERSET
Somerset Valley Nursing Home, Box 609, Route 22, Bound Brook

SUSSEX
Andover Nursing and Convalescent Home, Dimecrest Road, R.D. #1, Box 227-H, Lafayette

UNION
Glenside Nursing Home, 144 Gales Drive, New Providence
John E. Runnells Hospital, Berkeley Heights
Workmen's Circle Old Age Home, 225 West Jersey Street, Elizabeth

Academy of Medicine of New Jersey

NEW LIBRARY ACQUISITIONS — WINTER 1967

If you wish to dispose of your private libraries of texts and journals, call the Library of the Academy of Medicine of New Jersey first (201-748-3430). The library needs frequently used items as well as the rarer ones because issues become lost or in poor condition. Bound volumes replace unbound, and duplicates have exchange value. Hospital librarians, note: for texts and journals requested by your readers, but not in your own library, call the Library of the Academy of Medicine. Holdings will be checked and requests taken by telephone as well as by mail.

Allergy and Immunology

Samter, M. and Alexander, H., ed. Immunologic diseases. Boston, Little, Brown, 1965.

Basic Sciences

Ciba Foundation. Histones; their role in transfer of genetic information, A. V. S. de Reuck and J. Knight. Boston, Little, Brown, 1966 (Ciba Fdn. Study Group no. 24)

Ciba Foundation Symposium. The Thymus, G. E. W. Wolstenholme and R. Porter. Boston, Little, Brown, 1966.

Ganong, W. F. Review of medical physiology. Los Altos, Calif., Lange, 1963.

Gray, H. Anatomy of the human body, rev. and ed. by C. M. Goss. 28th ed. Phila., Lea & Febiger, 1966.

Horsfall, W. R. Medical entomology; arthropods and human disease. New York, Ronald, 1962.

Mary Antonia, Sister. Laboratory mathematics; a manual of principles and problems. St. Louis, Catholic Hosp. Assoc., 1965.

Rankin, W. H. Isometric way to instant fitness. London, Nelson, 1965.

Sinnott, E. W. Principles of genetics. New York, Mcgraw-Hill, 1958.

Winton, F. R. Human physiology. London, Churchill, 1955.

Wolf, G. Isotopes in biology. New York, Academic Press, 1964.

Cardiovascular System

American Heart Assoc. Auscultation of the heart. Leonard, J. J. and Kroetz, F. New York, American Heart Assoc., 1966.

American Heart Assoc. Heart disease and pregnancy. New York, American Heart Assoc., 1963.

American Heart Assoc. Home care of the child with rheumatic fever; a guide for parents. New York, American Heart Assoc., 1963.

Barker, W. F. Peripheral arterial disease. Phila., Saunders, 1966 (Major Problems in clinical surgery, v. 4)

Excerpta Medica Foundation. Endocrinology and diuretics in hypertension and edema; proceedings of the symposium, Austin, Texas, Dec. 1965. Amsterdam, Excerpta Medica, 1966.

Gross, H. Treatment of heart disease. Phila., Saunders, 1956.

Sannerstedt, R. Hemodynamic response in arterial hypertension. Goteborg, Elanders, 1966 (Thesis-Goteborg Univ.)

Warner-Chilcott Laboratories, Inc. Programmed course in electrocardiography. New York, Warner-Chilcott by Basic Systems, 1966. (Normal ECG, Pt.X: Review)

Dentistry

Harrison, J. and Podshadley, A. Cavity preparation and impression taking St. Louis, Mosby, 1965.

Howard, W. W. Carnahan's, The dentist and the law. 2nd ed. St. Louis, Mosby. 1965.

Peterson, S., ed. Comprehensive review for dental hygienists. St. Louis, Mosby, 1965.

Sears, V. H. New teeth for old. St. Louis, Mosby, 1965.

Dermatology

Stewart, W. D., Danto, J. L. and Maddin, S. Synopsis of dermatology. St. Louis, Mosby, 1966.

Wansker, B. A. X-ray and radium in dermatology. Springfield, Ill., Thomas, 1959.

History of Medicine

Cowen, D. L. Medical education; the Queen's-Rutgers experience, 1792-1830. New Brunswick, N.J., State Univ. Bicentennial and Rutgers Medical School, 1966.

Miller, G. Bibliography of the history of medicine, 1939-1960. Baltimore, Johns Hopkins Press, 1966.

National Library of Medicine. Bibliography of the history of medicine. Bethesda, Md., U.S. Public Health Service, 1965.

Rogers, F. R. and Sayre, A. R. Healing art: the history of The Medical Society of New Jersey. Trenton, Medical Society of New Jersey, 1966.

Toner, J. M. Annals of medical progress and medical education in the United States, Wash., D.C., Govt. Printing Office, 1874.

Medical Jurisprudence

Marino, J. F. and Pyrdek, T. A. Spinal anesthesia and the law of professional liability. Chicago, American Medical Assoc., 1965.

Pfizer Laboratories. Introduction to physicians liability for battery, negligence, and acts of others. Developed by Educational Design. Brooklyn, N.Y., Pfizer, 1966.

Medicine

Burgess, G. Current procedural terminology. Chicago, American Medical Assoc., 1966.

Ciba Foundation Symposium. Conflict in society, by A. de Reuck and J. Knight. Boston, Little, Brown, 1966.

Hunter, G. W., Frye, W. W., and Swartzwelder, J. C. Manual of tropical medicine. Phila., Saunders, 1966.

Kalb, S. W. Your future as a physician. New York, Richards Rosen, 1963.

U.S. Social Security Admin. A reference guide for health insurance under social security. Wash., D.C., Govt. Printing Office, 1966.

Neoplasms

American Cancer Soc. Youth looks at cancer; a text for secondary students. Purchase, N.Y., American Cancer Soc., 1960.

Boeyrd, B. Studies on tumor metastases. Goteborg, 1966 (Thesis-Goteborg Univ.)

Japanese Cancer Assoc., Tokyo. Evaluation of malignancy in experimental hepatomas. Tokyo, Japanese Cancer Assoc., 1966 (Gann Monograph no. 1)

Neurology

Ciba Foundation Symposium. Touch, heat, and pain, A. V. S. de Reuck and J. Knight. Boston, Little, Brown, 1966.

Cruickshank, W. M. Cerebral palsy . . . Syracuse Univ. Press, 1966.

Henry Ford Hospital. International symposium on pain. Boston, Little, Brown, 1966.

National Health Council. Neurologic disability as a national problem. New York, Hoeber, Harper, 1957.

Norback, B. Rheological aspects of cerebral blood flow and oxygen consumption. Goteborg, Elanders, 1966 (Thesis-Goteborg)

Nursing

Cunningham, L. S. Advanced and Basic medical-surgical nursing. Dubuque, Iowa, Brown, 1966.

Goodson, C. L. Temperature, pulse, and respiration measurement; a programmed notebook for nursing assistants. Bethesda, Md., National Institutes of Health, 1966.

Hartman, M. Home care and the incontinent patient. New Brunswick, N.J., Johnson and Johnson, 1966.

U.S. Public Health Serv. Closed drainage of the chest; a programmed course for nurses. Wash., D.C., Govt. Printing Office, 1965. (Publ. Health Serv. Publ. no. 1337)

Obstetrics and Gynecology

Babson, S. G. and Benson, R. C. Primer on prematurity and high-risk pregnancy. St. Louis, Mosby, 1966.

Brewer, T. H. Metabolic toxemia of late pregnancy. Springfield, Ill., Thomas, 1966.

Dick-Read, J. What every woman should know about childbirth. London, Heineman, 1965.

Willson, J. R., Beecham, C. T. and Carrington, E. R. Obstetrics and gynecology. St. Louis, Mosby, 1966.

Ophthalmology

Ellis, P. P. and Smith, D. L. Handbook of ocular therapeutics and pharmacology. St. Louis, Mosby, 1966.

Katzin, H. M. Rehabilitation of a child's eyes. St. Louis, Mosby, 1961.

Kelman, C. D. Cryosurgical atlas in ophthalmology. St. Louis, Mosby, 1966.

Orthopedics

Thorndike, A. Athletic injuries. Phila., Lea and Febiger, 1956.

U.S. Diabetes and Arthritis Program. Arthritis source book. Wash., D.C., Govt. Printing Office, 1966. (Public Health Serv. Publ. no. 1431)

U.S. Public Health Serv.; Surgeon General's Workshop on Prevention of Disability from Arthritis. Wash., D.C., Govt. Printing Office, 1966.

Otorhinolaryngology

McAuliffe, G. W. Practical otolaryngology. New York, Landsberger, 1957.

Pediatrics

Gasul, B. M., Arcilla, R. A., and Lev, M. Heart disease in children; diagnosis and management. Phila., Lippincott, 1966.

U.S. Public Health Serv. Neonatal respiratory adaptation; December 1963, Princeton, N.J., Bethesda, Md., Govt. Printing Office, 1963. (Publ. Health Serv. Publ. no. 1432)

Pharmacology and Pharmacy

Mintz, M. Therapeutic nightmare. Boston, Houghton, Mifflin, 1965.

Pharmacopoea internationalis. Geneva, World Health Organiz., v.1, 1951; v.2, 1955; suppl., 1959. (REF.)

U.S. Food and Drug Admin. Good manufacturing practice in manufacture, packing, or holding; regula-

tions under The Federal Food, Drug, and Cosmetic Act, Title 21; Code of federal regulations. Wash., D.C., Govt. Printing Office, 1963 (reprint).

U.S. Food and Drug Admin. Federal Food, Drug, and Cosmetic Act, Title 21, Pt. 1 (Act rev. Oct. 1962; regulations rev. Jan. 1964) Wash., D.C., Govt. Printing Office, 1964.

Psychiatry and Psychology

American Hosp. Assoc. Psychiatric emergencies and the general hospital. Chicago, Am. Hosp. Assoc., 1966.

American Hosp. Assoc. Psychiatric services in general hospitals. Chicago, Am. Hosp. Assoc., 1961.

American Hospital Assoc. Rehabilitation services in hospitals. Chicago, Am. Hosp. Assoc., 1966.

American Hospital Assoc. The non-segregated hospitalization of alcoholic patients in a general hospital. Chicago, Am. Hosp. Assoc., 1966.

Cohen, S. Physicians' manual on alcoholism. Saskatoon, Saskatchewan, Canada, 1966.

Glasscote, R. General hospital psychiatric units. Wash., D.C., American Psychiatric Assoc., National Assoc. for Mental Health, 1965.

Kaufman, M. R. Psychiatric unit in a general hospital. New York, International Univ. Press, 1965.

Lawson, P. R. Frustration; the development of a scientific concept. New York, Macmillan, 1965 (Critical issues in psychology ser.)

Lindquist, G. Mental changes after transsphenoidal hypophysectomy. Goteborg, 1966. (Thesis-Goteborg Univ.)

O'Brien, D. Rare inborn errors of metabolism in children with mental retardation. Wash., D.C., Children's Bureau, 1965.

Rutter, M. Children of sick parents; an environmental and psychiatric study. London, Oxford, 1966 (Maudsley Monograph, no. 16)

Schur, E. M. Crimes without victims; deviant behavior and public policy. Englewood Cliffs, N.J., Prentice-Hall, 1965.

Schwarz, B. and Ruggieri, B. A. Parent-child tensions. Phila., Lippincott, 1957.

Stafford-Clark, D. What Freud really said. London, Macdonald, 1965. (What they really said series)

Tahka, V. Alcoholic personality. Helsinki, Finland, Maalaiskuntien Liiton Kirapaino, 1966.

Reference Works

American Academy of General Practice. 1966-1967 membership directory with constitution and by-laws. Kansas City, Mo., Am. Acad. Gen. Practice, 1966.

American Medical Assoc. Directory of approved internships and residencies. Chicago, Am. Med. Assoc., 1965.

American Psychological Assoc. Directory, ed. by J. A. Lazo. Wash., D.C., American Psychol. Assoc., 1966.

Johnson and Johnson, Glossary of medical and surgical terms. New Brunswick, N.J., 1966.

U.S. Dept. of Health, Education and Welfare. Air pollution publications. Wash., D.C., Govt. Printing Office, 1966.

Reproduction

Consumers union report on family planning. Mount Vernon, N.Y., Consumers Union, 1966.

Surgery

Al Akl, F. M. Surgical technigrams. New York, McGraw-Hill, 1954.

Blades, B. Surgical diseases of the chest. St. Louis, Mosby, 1966.

Tauber, R. Basic surgical skills; a manual with appropriate exercises. Phila., London, Saunders, 1955.

Thorndike, A. Manual of bandaging, strapping and splinting. 2nd ed. Phila., Lea and Febiger, 1950.

PHYSICIANS' RELATIONS WITH COMMUNICATION MEDIA

Many people, literate and well educated, do not possess a special knowledge of medicine. Medical books and journals are not always easily accessible or readily understandable.

Information concerning health and health education frequently comes from the newspaper. The press, popular magazines, radio, and television are often the primary (and for many the only) source of information about medicine and health.

The public is eager to learn all it can of the most recent advances in the cure of diseases. It is anxious to learn about and put into effect the best methods of public hygiene and preventive medicine. The press and other communication media have correctly considered such subjects as news. It is in the public interest that this news be accurate and presented by spokesmen trained in medicine.

Specific decisions regarding relations between physicians and the communications media

must be determined at the community level by the local medical society and its membership. These guidelines are offered to the county medical societies as a starting point and a reference to help them develop and improve press relations at the community level.

The following guidelines have been approved by the House of Delegates and by the Judicial Council of the American Medical Association to aid in the smoother flow of accurate medical news from the medical profession to those who collect and disseminate such news.

I. Each medical society should appoint a communications committee, or designate a responsible individual to provide the communications media with accurate information on medical matters of interest to the public. This information should be given freely. The communications committee may also serve in an advisory capacity to all communications media and to physicians of its society in questions involving relationship with the media. To assist the media in obtaining information, medical societies may furnish the media with a list of physicians from whom authoritative information may be obtained; or may have a designated individual as liaison between the media and the profession who will furnish names of physicians to provide authoritative information when required.

These spokesmen may be quoted by name and title. This should not be considered by their colleagues as seeking publicity, since this is done in the best interest of the public and the profession. They may ethically provide appropriate information regarding medical and public health matters which have been discussed in technical papers or during medical meetings.

The officers, committee chairmen, and designated spokesmen of medical societies should be available at all times to bonafide representatives of the communications media in order that authentic information may be obtained as soon as possible.

II. Because certain news (1) is a part of the public record, or (2) is a matter of concern to civil authorities, it is readily available for publication. Physicians should cooperate with the press to insure that medical news of this sort is available more promptly and more accurately than would be possible without their assistance.

News in this category, known as news in the public domain, includes: births, deaths, accidents, and police cases.

The following information in the public domain can be made available without the patient's consent:

(a) Personal information: patient's name, address, age, sex, race, marital status, employer, occupation, name of parents in case of births, name of next-of-kin in case of deaths.

(b) Nature of accident:

Only general information regarding injuries will be released. This consists of the name of the injured portion of the body such as back injury, etc.

It may be stated that there are internal injuries.

If the patient is unconscious when brought to the hospital, a statement to that effect may be made.

Statements regarding the circumstances surrounding shootings, knifings, and poisonings are properly police matters and questions whether they were accidents or otherwise should be referred to the appropriate authorities.

A statement may be made to the effect that the patient was injured by a knife or other sharp instrument, but no statement may be made as to whether or not it was assault, accident, or self-inflicted.

A statement may be made that the patient received burns and the member of the body affected may be indicated.

No statement may be made that there was a suicide or attempted suicide.

No statement may be made to the effect that intoxication or drug addiction was involved.

No statement may be made that moral turpitude was involved.

(c) Diagnosis and prognosis:

Inasmuch as a diagnosis may be made only by a physician and may depend upon X-ray and laboratory studies, no statement regarding diagnosis should be made except by or on behalf of the attending physician. For the same reason prognosis will be given only by the attending physician or at his direction.

(d) Patient's condition:

A statement may be made as to the general condition of the patient using the following classifications: minor

injuries or similar general diagnosis, good, fair, serious, critical.

III. When information concerning a specific patient is requested, the physician must obtain the consent of the patient or his authorized representative before releasing such data. The patient's decision is final under the law. A physician may (within the limits of good taste) encourage the patient or his family to state the cause of illness, or the cause of death, when this information is requested by a bonafide representative of the press. Where a person of public interest is involved, and the release of information has been authorized, the physician may arrange for regular bulletins concerning the person. The ethical physician will use restraint and good judgment regarding the use of his name in connection with such published reports.

IV. Publication of photographs of physicians, who appear before recognized medical organizations, either in the official program of the scientific meeting or before the public press in connection with such meeting, is permissible. The use of photographs in the press when physicians are elected to office or when physicians are quoted by name on matters of general interest, not related to the care of a specific patient, is likewise permissible. Photographs of physicians in connection with civic or social affairs, not related to medical news or the care of patients, may be published unless the frequency of such photographs bespeaks self-exploitation. This applies also to magazine articles. Physicians should clear such publicity, whenever possible, with their county society.

V. The promise of radical cures or boasting of extraordinary skill or success is unethical. It is contrary to the best interest of the public.

VI. For purposes of clarity, the following principles should guide physicians who appear on TV or radio programs, or who are interviewed in other media of public information, such as newspapers and magazines:

(a) Doctors of medicine are expected to refrain from sponsoring products directly or by implication.

(b) When introduced as a doctor on TV or radio programs, or quoted in an article as a physician in newspapers and magazines, such individual cannot escape the implication of representing the medical profession and his conduct should be in keeping with the high standards of the profession.

(c) Sound judgment, good common sense, and adherence to the Principles of Medical Ethics are expected of any physician when appearing on TV or radio programs, or in other media of public information, such as newspapers and magazines, in whatsoever capacity.

VII. Members of medical society speakers' bureaus, because of the very nature of their assignments, may be interviewed or quoted by the communication media. This is not considered unethical.

The members of these committees must be most circumspect and uphold the ideals of the medical profession.

VIII. At all times the doctor of medicine is expected to comply with the Principles of Medical Ethics. Section 10 of the Principles says: "The honored ideals of the medical profession imply that the responsibilities of the physician extend not only to the individual, but also to society where these responsibilities deserve his interest and participation in activities which have the purpose of improving both the health and the well-being of the individual and the community." The Judicial Council construes Section 10 as encouraging physicians to work with the communications media as an integral and important part of the principle of upholding the responsibility of the physician to society as a whole.

It shall be the responsibiilty of each county society to see that these Principles are not violated.

IX. Doctors of medicine are ethically and legally required to protect the personal privacy and other legal rights of patients. The doctor-patient relationship and its confidential nature must be maintained. With these considerations in mind, the physician may assist the representatives of these media in every way possible.

—AMA Judicial Council, November 26, 1966.

MEETINGS OF MEDICAL INTEREST

This listing has been compiled by the Academy of Medicine of New Jersey. For additional information, including exact time of meetings, write to the society or hospital listed.

1967
March

8 Mercer County Medical Society
"Cancer Chemotherapy"

8 Ocean County Medical Society

8 The Academy of Medicine of New Jersey
St. Peter's General Hospital, New Brunswick
"Recent Advances in Gastrointestinal Malignancy"

9 Burlington County Medical Society

9 Essex County Medical Society
"Who'll Practice — Where and How in the Years Ahead?"

10 Cooper Hospital Seminar, Camden
"A New Approach to Stroke Prevention"

11 New Jersey State Society of Anesthesiologists
Cherry Hill

14 Bergen County Medical Society

15 Middlesex County Medical Society

15 Essex County Chapter, New Jersey Psychiatric Society

15 Newark Beth Israel Hospital
"Carcinoma of the Breast"

16 Somerset County Medical Society

16 Somerset Hospital Postgraduate Medical Education
"Bone Tumors"

16 Morris County Medical Society
"Hodgkins' Disease"

17 Cooper Hospital Seminar, Camden
"Chemotherapy of Primary and Metastatic Malignancies"

17 Academy of Medicine of New Jersey
St. Barnabas Medical Center, Livingston
"New Development and Practical Application of Ophthalmic lenses"

21 Passaic County Medical Society

22 The Academy of Medicine of New Jersey
Presbyterian Hospital, Newark
"Recent Advances in Diabetes"

25 The Academy of Medicine of New Jersey
Montefiore Hospital, Bronx, N.Y.
Workshop on Anesthesia

28 Cape May Medical Society

29 The Academy of Medicine of New Jersey
Robert Treat Hotel, Newark
"Cancer — 1967"

29 New Jersey Neuro-Psychiatric Association, Essex County Chapter
The Academy of Medicine of New Jersey
"Early Development of Empathy in Psycho-Therapy and Psycho-Analysis"

29 New Jersey Heart Association
Robert Treat Hotel, Newark
"Angina — What's New?"

30 Sandoz Postgraduate Medical Lectures
"Immunization of Children"

30 New Jersey State Department of Health
Annual Conference of State and Local Health Officials
Prince Theater, Princeton

31 Cooper Hospital Seminar, Camden
"Medico-Legal Aspects of Toxic and Adverse Drug Reactions"

April

4 The Academy of Medicine of New Jersey, Sections on Anesthesiology and Dentistry, co-sponsored with New Jersey Dental Society of Anesthesiology
Paul Samperi's Restaurant, Asbury Park
"Anesthesia for the Ambulatory Patient"

4 Hudson County Medical Society
"The Practice of Medicine as required by Law"

5 The Academy of Medicine of New Jersey
Middlesex General Hospital, New Brunswick
"The Retarded Child"

5 The Academy of Medicine of New Jersey
Mountainside Hospital, Montclair
"History of Orthopedics"

6 The Academy of Medicine of New Jersey
St. Joseph's Hospital, Paterson
"Myocarditis and the Myocardiopathies"

6 The Academy of Medicine of New Jersey
Monmouth Medical Center, Long Branch
"Recent Advances in Diabetes"

11 Bergen County Medical Society

11 Cumberland County Medical Society

12 Ocean County Medical Society

13 Burlington County Medical Society

17 Newark Beth Israel Hospital Weekly Surgical Conference
"Current Status of Surgery for Peptic Ulcer"

18 Warren County Medical Society

18 Passaic County Medical Society

18 Essex County Medical Society
"Counseling Sexually Incompatible Marriage Partners"

19 Middlesex County Medical Society

19 New Jersey Water Pollution Control Association Annual Meeting
Colony Motel, Atlantic City

20 Morris County Medical Society

25 The Academy of Medicine of New Jersey
Muhlenberg Hospital, Plainfield
"Acute and Chronic Care of the Alcoholic"

26 Monmouth County Medical Society

28 The Academy of Medicine of New Jersey
Rutgers-The State University
"Recent Advances in Neurophysiology"

29 The Academy of Medicine of New Jersey
St. Barnabas Medical Center, Livingston
"Respiratory Physical Therapy"

The Smarter Freshmen Don't Smoke

When 3,567 freshman at the University of Illinois, Urbana, were questioned about their smoking habits, the investigators found that there was an inverse association between grade average and smoking: of students with an "A" average, only 16.7 per cent smoked, while 59.1 per cent of "E" average (the lowest grade) students smoked.

Sixty per cent of the freshman did not smoke, and 43 per cent of those who smoked wanted to stop. The student's money allowance had a relationship to smoking. When parents provided full financial support, the number of freshman who smoked was above average. The average weekly spending money was slightly over $8. When it was more than $5, the percentage of smokers was above average. Only 20 per cent of those who received sole financial support from a scholarship smoked. Of those who smoked 12 months ago, 56 per cent had increased the number of cigarettes smoked per day. More than 27 per cent smoked a pack a day or more.

Nine out of ten freshman believed that the cigarette smoker had a greater chance of developing lung cancer than the nonsmoker. The investigator felt that most students may be more ready to tighten university smoking regulations than their elders on the campus. "How much longer," asked Dr. Dunn, "can universities enjoy the status quo and collect revenue from campus cigarette sales knowing that smokers may pay later with years of disability or premature, slow, and painful death? Freshman who do not wish to smoke comprise a group toward which universities should focus effort in prevention."

Dunn, Dorothy F.: *Journal of the American Medical Association, January 2, 1967.*

ANNOUNCEMENTS

Symposium On Alcoholism

On March 22 (the second day of spring), there will be a symposium on alcoholism at the Chalet, which is at 122 West Passaic Street in Rochelle Park. This is a Bergen County Medical Society project, with an assist from Pfizer and Hoffman-LaRoche. The focus will be on what the GP should know about alcoholism; and AAGP awards three hours full credit for attendance. Moderated by Dr. Michael Shenkman of Westwood, New Jersey, the symposium will include presentations by Dr. Marvin Block of Buffalo, New York, Dr. Joseph Rosenfeld of Hartford, Connecticut, and Dr. Morris Chafetz of Boston, Massachusetts. The meeting starts promptly at 8 p.m.

Health Fair in Plainfield

The 1967 Health Fair is sponsored by the Plainfield Young Women's Christian Association in cooperation with the doctors of Union County. The Fair will be held at the YWCA, 232 East Front Street, Plainfield, on April 8 (Saturday) and April 9 (Sunday). This Fair will offer educational material to inform the public on available services. Demonstrations and a variety of diagnostic tests supervised by medical personnel will also be offered. There will be no admission charge.

A similar exposition held in 1966 attracted 30 exhibitors. For further information call Mrs. Fred Shunaman at the Plainfield YWCA (201) 756-3836.

Graduate Colloquium In Philadelphia

The Philadelphia County Medical Society's famous — and annual — seminar for practitioners is scheduled for April 11, 12, 13, and 14, 1967 at the Bellevue Stratford. On the agenda this spring are such topics as cerebral apoplexy, disorders of coagulation, genetically determined disease, thyroidology, dermatologic signs of internal disease, pulmonary insufficiency, and gastrointestinal disorders. Registration is $15 for any one day, or $50 for the entire 4-day program — AAGP-approved, of course. For a detailed program or registration form, write to the Philadelphia County Medical Society, 2100 Spring Garden Street, Philadelphia 19130.

Colloquium On Schizophrenia

Friday morning, April 21 is the date; 9:30 a.m. is the time; and Marlboro State Hospital is the place. This is for a seminar on schizophrenia. Discussion will be led by Silvano Arieti, M.D., editor of the *Basic American Textbook of Psychiatry*. The meeting is in the Administration Building. The State Hospital is near the intersection of State Highways 34 and 520 (five miles west of Red Bank), near Garden State Parkway Exit 109.

Occupational and Physical Therapy Fellowships

The National Society for Crippled Children and Adults announces scholarships for completion of training in physical and occupational therapy. These are sponsored by a grant from the Kappa Delta Phi sorority. For details, apply before May 1, 1967 to the Scholarship Coordinator, National Society of Crippled Children, 2023 West Ogden Avenue, Chicago, Illinois 60612.

Refresher Course In Pediatrics

An intensive curriculum in all aspects of pediatrics has been planned for the five day period beginning May 1, 1967 at the Children's Hospital in Philadelphia. AAGP credit is awarded. For more details write to Post

Graduate Education Committee, Children's Hospital of Philadelphia, 1740 Bainbridge Street, Philadelphia, Pennsylvania 19146.

Cleft Palate Symposium

Announcement is made of an all-day symposium on cleft palate, to be held at the Monmouth Medical Center in Long Branch on May 3, 1967. A practical program presented by a star-studded faculty has been developed. The fee is $4. Attendance will be limited and registration must be made in advance. For further information or enrollment, write to Dr. Robert J. Isaacson, 532 Cedar Avenue, West Long Branch 07764.

Blood Banking Guide

You may now obtain a new AMA pamphlet from the Department of Environmental Health of the AMA at 535 North Dearborn Street, Chicago, Illinois 60610. This is a guide for medical society committees concerned with the procurement, storage, and transfusion of human blood. Specific recommendations are made both to county medical societies and to blood banks. This pamphlet is available without charge.

OBITUARIES

Dr. Irving E. Deibert

On January 5, 1967, Dr. Irving Deibert, one of south Jersey's leading surgeons, died at the age of 72. He was a member of Jefferson Medical College's distinguished class of 1917, and became a member of the surgical faculty at the University of Pennsylvania. He was one of the founders of the American Board of Surgery, and was chairman of the surgical service at Cooper Hospital in Camden. For some years, he headed the Board of Managers of the Camden County Hospital, and for seven years was president of the New Jersey State Board of Health. He had active duty in our Army's Medical Corps during World War I, and also had a tour of duty as president of the Camden County Medical Society.

Dr. David S. Rhone

One of Camden County's most useful lives was terminated on January 10, 1967 with the death that day of Dr. David S. Rhone. Born in 1878, Dr. Rhone received his M.D. from the University of Maryland in 1908. Prior to that he had earned a degree in pharmacy, and, indeed, operated a retail pharmacy for many years.

Dr. Rhone was extremely active in civic affairs in south Jersey. He was on the Camden City Commission for 24 years, most of the time as director of public safety. He was chairman of the board of the Camden Municipal Hospital. He served as county coroner, freeholder, and on the county board of health. Dr. Rhone was a general practitioner of the old school, serving as the family doctor to many of the people in his corner of the state.

Dr. Aloysius Rieman

On Saturday, January 28, Aloysius Rieman saw patients as usual. And on Sunday, January 29, he was dead. Thus, there passed from the scene one of Hudson County's most useful citizens. He earned his M.D. at Bellevue in 1922 and interned at the Jersey City Medical Center. The following year — 1923 — he went into private practice in Jersey City and had been serving the people of that area for 44 years. He was medical coordinator for Hudson County Civil Defense. He was a pioneer in developing the now-famous 200-bed "packaged hospital" for Civil Defense needs. He developed plans for constructing and provisioning radiation shelters for families. He was the first to interest himself in the role of cryotherapy. He served in the Army in the first World War and in the Navy in the second. He was consulting surgeon at the North Hudson Hospital and had staff affiliations in most of the hospitals in his county. Dr. Rieman was 67 years old at the time of his death.

BOOK REVIEWS

The Boys Of Boise. John Gerassi. New York, 1966, The Macmillan Company. Pp. 328 ($5.95)

Two themes run concurrently in the *Boys of Boise:* power politics and homosexuality. The constant shifting of focus from one to the other produces a break in the continuity of the text. Much of the material is factual, made up of incidents and events. Thus, the book sounds like a series of reports rather than an integrated whole.

To those curious about homosexuality, the contents may prove informative and, yes, even fascinating. To others the text may well be tedious, boring, or even sordid. Mr. Gerassi paints an unvarnished picture of homosexuality. His approach is understanding and sympathetic. The book is well documented from the historical, medical, and legal standpoints.

The question of homosexuality between consenting adults is candidly reviewed. No pronouncements are made. Many authorities are quoted. The molestation of minors is also thoroughly discussed and the necessity of protecting them is emphasized. In this instance, we are reminded that it is not the homosexual alone who is guilty. It must be remembered that sexual inversion is treatable as well as punishable by law. Mr. Gerassi says that the law can be contorted and used to worsen conditions. He charges that money-powered factions have deliberately withheld treatment facilities, that they have jailed and prosecuted innocent victims, freed the guilty, lied, twisted the truth, and misguided people. They have done this, he feels, out of selfish interests. This "gross corruption of law," Mr. Gerassi supports by citing documents and court records. In this light the book more than redeems itself.

THEODORE A. ANDERSON, M.D.

Touch, Heat, and Pain (Ciba Foundation Symposium). Edited by A. V. S. DeReuck and Julie Knight. Boston, 1966, Little, Brown and Company. Pp. 389. Illustrated. ($14.00)

This symposium on touch, heat, and pain suffers from a lack of direction. Although the 14 papers which form the body of the work (too much space is taken up with unproductive discussion) have been placed in five sections, the reader interested in the title subjects has to battle his way through paper after paper dealing with highly technical material, of no interest to the clinician, in order to extricate material which can then be regrouped to bear upon the particular sensory modality in which he may be interested. One has only to examine the subject index to see that the title topics tended to become obscured by consideration of methodology and theory. Various speakers refer repeatedly to the lack of specific information which is available (or emerged) about particular sensory modalities, such as pain, and about important practical considerations, such as the morphologic substrate of these sensations. The utility of this book will be chiefly appreciated by the research specialist in the field.

FRED A. METTLER, M.D.

Clinical Management of Behavior Disorders in Children. Harry Bakwin, M.D. and Ruth Bakwin, M.D. Philadelphia, 1966. W. B. Saunders Co. Pp. 652. Illustrated. ($14.50)

This third edition, like its predecessors, is without peer in its field. By additions and expansions of material it has been made even more valuable and complete. Beginning with a succinct but thorough discussion of growth and development and the psychological care of the normal newborn, the Bakwins cover the entire field of the handicapped child, the etiology, diagnosis, and handling of behavior disorders, developmental disorders, both physical and emotional, training problems and technics, the commoner psychosomatic disorders, and even the psychoses.

The outstanding value to the pediatrician (as well as to the "other workers" the authors indicate as their intended audience) lies in the beautifully simple writing and uncomplicated discussions throughout. This book is so easy to read that one who is interested in its field will find it almost as hard to put down as a gripping novel. While not excessively opinionated there is nothing indefinite about the suggestions for the handling of all the situations covered; this is a refreshing difference from most of the books in the field. Perhaps the explanation for this lies in the fact that the authors are pediatricians who recognize psychiatry as an essential part of their specialty, not psychiatrists writing down to the pediatrician.

Every chapter in the book is followed by a carefully selected bibliography of suggested readings for further information on that particular subject. These lists not only indicate the enormous amount of material covered by the authors in their preparation for writing, but also how effectively they have brought in all the newer material available in each field. And one is impressed by the judicious selection of sources recommended.

This is a book which might well be read and studied by every pediatrician, as well as everyone else dealing with children and their problems; most psychiatrists would also benefit. It cannot be too highly recommended.

CLEMENT E. SCHOTLAND, M.D.

Noise: Occupational Hazard and Public Nuisance. Alan Bell. Geneva 1966, World Health Organization. Pp. 131. Paperback. Available at $2 from the Columbia University Press, 2960 Broadway, New York City 10027

Man's sense of hearing is subjected to increasing strains that may lead to both deafness and emotional disorders. The effect of noise is insidious because the nervous system is so adaptable that high noise levels can apparently be accepted without demur, even though hearing is being progressively impaired.

This compact volume meets a need for a short, jargon-free account of the effects of noise on the body and on the psyche. It reviews methods that have been, or should be, tried to control it. The editors underline our failure to pay sufficient attention to noise, even though enough is already known to prevent most cases of occupational hearing loss. After describing the medical aspects of hearing, the operation of hearing-conservation programs, and the engineering control of noise, the text discusses the assessment of disability, legislation in many countries, and the problems of community noise. Throughout the text, reference is made to dozens of papers on the subject. Many practical noise control methods are described and evaluated.

JOSEPH ZAGURY, M.Sc.

The Pediatrician's Ophthalmology. Edited by S. D. Liebman, M.D. and S. S. Gellis, M.D. with 23 contributors. St. Louis, 1966, Mosby. Pp. 352 with 127 illustrations. ($19.50)

This is an excellent book — one just as valuable for the ophthalmologist as for the pediatrician, as the title implies. The seventeen chapters are all well written by acknowledged leaders in their respective fields.

The chapter on external diseases is especially useful with its well written descriptions and remedies although what length of time is meant by "prolonged" palliative treatment of chalazion is not specified. The use of cocaine solution as a local anesthetic for probing the tear passages of an infant would not meet with universal approval. The section on eye signs and symptoms of systemic diseases is well done. Impressive is the great stress laid on the avoidance of prolonged use of steroids. Connective tissue and metabolic disorders are well covered.

The brief discussion on the management of cataracts is clearly written and of definite value. The paragraphs concerning trauma contain sound and conservative advice, especially to the physician who first sees the unhappy patient. The final two chapters, on specific reading disabilities and on genetics, I found well written and very informative.

This book fulfills a definite need and should be kept at hand for frequent reference.

S. Jerome Greenfield, M.D.

Human Development. Edited by Frank Falkner, M.D. Philadelphia, 1966, Saunders. Pp. 644. Illustrated. ($20.00)

With 29 contributing authors, this book presents a new approach to the field. Recent strides in the knowledge of enzymes and genes have been incorporated into the discussion of normal and abnormal development in such a way as to shed light on problems which in the past were not clearly understood.

Most books on development place little emphasis on psychological development. Here, however, almost 10 per cent of this text is devoted to it. The chapters by Dr. Kagan on conscience and sexuality are fascinating in application to the problems of today's complicated world. It should not be implied that other areas of development are neglected. This is an excellent and complete presentation of the entire subject.

The appendix outlines embryology and neonatal development in a concise fashion which serves as a quick review and reference. Phoebe Hudson, M.D.

The New Way To Live With Diabetes: A Complete Guide. Charles Weller, M.D. and Brian R. Boylan. New York, 1966, Doubleday. Pp. 133. Illustrated. ($3.95)

The increase in the number of diabetics from year to year stimulates rising interest in the general population on the subject — to the point where nearly every year a new book for the layman appears about progress in diabetes. The newest addition to the library on diabetes is this book by Weller and Boylan. Here, diet and insulin are discussed in an easily understandable manner, with hints about behavior when the diabetic eats out; a special chapter is dedicated to the diabetic child's diet. The three types of diabetes — insulin dependent, maturity onset, and stress diabetes — are explained in detail, with many practical hints about insulin injection, prevention of reactions, and the importance and value of exercise.

Another chapter is devoted to the problem of living with diabetes; the skin complications, vascular changes, neuropathies, foot ailments, pregnancy, and emotional problems. Dental complications, travel of a diabetic, and management of hypoglycemia are individually stressed.

Added attractions of the book are several tables on normal heights and weights, energy equivalents of food calories expressed in minutes of activity, and a list of foods to be avoided. The highly informative book can be recommended without reservation. The authors have written a different, highly practical guide for the diabetic. Otto Brandman, M.D.

Etiology of Urinary Calculi. L. B. Joshi, M.D. Shivaji Nagar, Poona, India, 1966. Joshi Hospital. Pp. 113. (Price not stated.)

This monogram reveals that more scientific work needs to be done to establish the etiology of urinary calculi. It does not present actual evidence of a geologic, biologic, or experimental nature to establish the etiology of calculi. Dr. Joshi reviews the composition of different soils and food products, and their effects on formation of calculi. He neglects to emphasize attention to urinary obstruction and infection. His description of geographic distribution of calculi is interesting but he confines most of his studies to India, Pakistan, and some nearby islands. Certainly, the subject requires much more study in depth.

I subscribe only partly to his last sentence; viz: good nutrition, physical fitness, and balanced minerals in diet will prevent the disease of urinary calculi. Unfortunately, even with this regime one may develop calculi. Edward P. Levine, M.D.

Community Mental Health Services In Northern Europe. Sylvan Furman. Bethesda, Maryland, 1966. U. S. Department of Health, Education and Welfare. Pp. 209. ($1.75)

Mr. Furman here reports on two visits he made to Great Britain, the Netherlands, Denmark, and Sweden to observe mental health programs there. It should be of interest to anyone concerned with mental health center development in the United States. The prevailing philosophy of all the programs described appears to be that hospitalization of the mentally ill is only one phase in the treatment plan because, for most patients, the goal is rehabilitation or control of symptoms rather than cure. Readmission of a patient is, therefore, not considered a treatment failure but part of a total plan. Under our present arrangement "the revolving door is better than a locked door." Reading this book, one becomes impressed with the variety of services offered in the different countries. They are certainly not carbon copies of each other and represent very practical plans to suit the needs of their communities. We can learn much from the way personnel are utilized. Many examples are given of the day by day functioning of the programs, some of this material being based on tape recordings of actual conferences. The appendix contains a glossary of British terms and abbreviations and a bibliography for those who are stimulated to further reading on the subject.

This book is recommended to all professionals and non-professionals interested in the field of mental health.

Felix A. Ucko, M.D.

ABSTRACTS

ON TUBERCULOSIS AND OTHER RESPIRATORY DISEASES. ISSUED BY THE NATIONAL TUBERCULOSIS ASSOCIATION

MARCH, 1967 • VOL. XL, NO. 3

LUNG SCANNING IN DIAGNOSING PULMONARY THROMBOEMBOLISM

Pulmonary arteriography and radioisotopic lung scans in a group of patients with a variety of cardiorespiratory disorders showed that the arteriographic technic is of greater value in determining the location and extent of intra-arterial lesions than scanning.

Selective pulmonary arteriography and radioisotopic lung scans were performed in 73 patients suspected of having pulmonary thromboembolism and in patients known to have other cardiorespiratory illnesses. The objective was to identify the accuracy of the scan in the diagnosis of thromboembolic disease.

The final diagnosis was pulmonary thromboembolism in 27 of the patients and failure of the left ventricle without pulmonary thromboembolism in 14. The diagnosis in the remainder included pneumonia, pulmonary emphysema, bronchogenic carcinoma, and a variety of other cardiac or lung conditions.

The diagnosis of pulmonary thromboembolism was made on the basis of angiographic evidence of intra-arterial filling defects or obstructed pulmonary arteries or both, together with appropriate clinical findings.

A selective pulmonary arteriogram and a radioisotopic lung scan were performed in all the patients. The interval between the two studies did not exceed 24 hours and was less than one hour in most cases.

The arteriograms were obtained by guiding the catheter under fluoroscopic observation to a point in or just beyond the undivided portion of the pulmonary artery.

Lung scanning was begun promptly after 100 to 150 μc of ^{131}I-labeled macroaggregated human serum albumin had been injected into an antecubital vein.

Since the great majority of macroaggregated particles are 10 to 100 microns in diameter, most of them are trapped at the precapillary level during their initial transit through the lungs. Of the radioiodinated material that passes through the pulmonary capillaries, an insignificant amount presumably returns to the lungs via the bronchial arteries. Distribution of the macroaggregated albumin throughout any segment of the lung is proportional to the relative pulmonary blood flow to that segment. Thus, the radioactivity recorded from different regions of the lung is an index of the relative amounts of pulmonary capillary perfusion in those sites.

Of the 73 scans, 63 were anterior and 10 posterior. The rectilinear scintillation scanner was set to accept a pulse height differential of 340 to 400 kev. A contrast enhancement circuit was utilized with background cutoff determinded by the count rate over the heart.

Scanning was done with the patient lying directly beneath an X-ray tube. At the end of the procedure, a roentgenogram of the chest was obtained to ensure accurate localization of "cold" areas and diaphragmatic position.

HERBERT L. FRED, M.D.; JOHN A. BURDINE, JR., M.D.; DAVID A. GONZALEZ, M.D.; ROBERT W. LOCKHART, M.D.; CARROLL A. PEABODY, M.D.; and JAMES K. ALEXANDER, M.D. *The New England Journal of Medicine*, November 10, 1966.

In the patients with pulmonary thromboembolism, the major arteriographic abnormalities were complete or incomplete obstruction of various pulmonary arterial branches, intra-arterial filling defects, decrease in volume of affected lung segments, changes in the caliber of involved arteries proximal or distal to the occulsive lesion, or combinations of these.

In the group with cardiorespiratory illnesses other than thromboembolism, the angiographic findings varied, but in none was there evidence of intravascular occlusions or filling defects.

Of the 27 patients with pulmonary thromboembolism, 22 had scans showing decreased radioactivity over the same regions of lungs in which the angiogram revealed intra-arterial occlusive lesions.

Most of the patients with disorders other than pulmonary thromboembolism had abnormal scans characterized by varying degrees of diminished radioactivity over the diseased segment or segments.

Limitations

Although all but one of the 27 patients with angiographic evidence of pulmonary thromboembolism had abnormal lung scans, in five the scan failed to reflect accurately the location and extent of the lesions. Of the five patients, four had relatively normal radioactivity over the areas of lung supplied by main or lobar pulmonary arteries that contained large, partially occlusive thromboemboli. Thus, the scanning technic may not disclose the presence of large intravascular lesions when there is generalized reduction in pulmonary arterial blood flow, particularly in one lung.

The one patient with pulmonary thromboembolism whose scan was normal had acute pleuritic pain, frank hemoptysis, minimal pleural effusion, and a small posterior, juxtadiaphragmatic infiltrate. His angiogram disclosed essentially complete obstruction of the segmental artery supplying the infarcted tissue. Forty-eight hours after the initial study, the infiltrate had enlarged to the extent that a scan now showed a "cold" area in the diseased region.

This case illustrates the limitations of the scanning technic in detecting small areas of decreased perfusion when they are in close proximity to the diaphragm. Normal scans may also occur if reduction of pulmonary blood flow is bilaterial, diffuse, and equal.

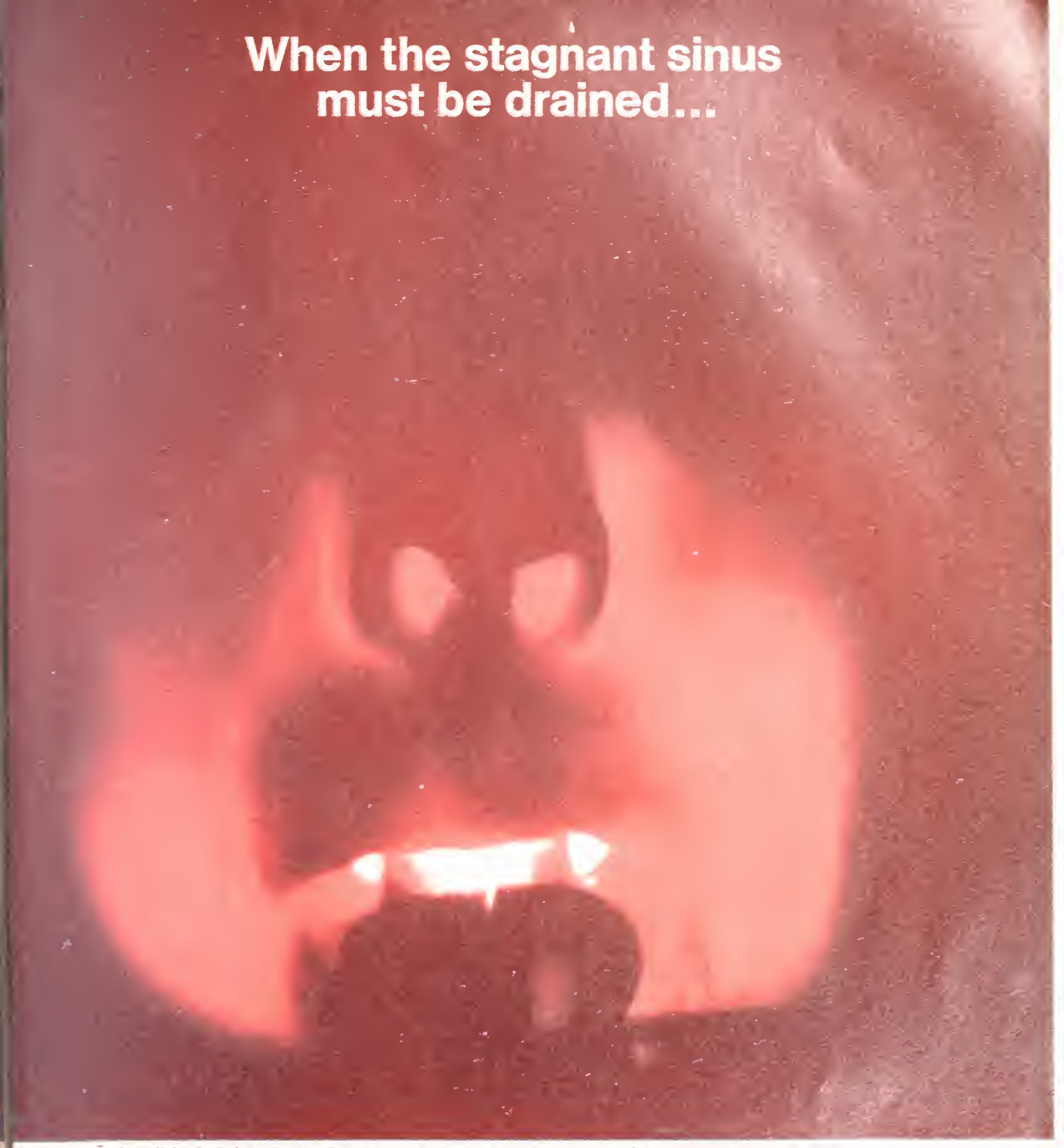
The majority of patients without thromboembolic disease had scans showing decreased radioactivity over regions of lung in which the pulmonary arteries were angiographically patent. This provides further support for the concept that "cold" areas on the lung scan may result from factors other than obstructive lesions within the pulmonary arteries.

Additional reasons for caution in the interpretation of the lung scan deserve emphasis. The method does not distinguish pulmonary bullae from thromboemboli, both of which may go undetected or appear as avascular, hyperlucent areas on roentgenograms of the chest. Patients with failure of the left ventricle may have diminished radioactivity over one or both lower-lung fields. This is significant not only because of the increased incidence of pulmonary thromboembolism in patients with cardiac disease but also because of the frequency with which such emboli lodge in the lower lobes.

While angiograms need not be taken in every patient suspected of having pulmonary thromboembolism, nevertheless, the diagnosis remains presumptive without angiographic confirmation, regardless of how "typical" the clinical, laboratory, and roentgenographic picture may be. Angiographic proof of thromboembolism is desirable but need not be a prerequisite for anticoagulant therapy or for interruption of blood flow through the inferior vena cava. However, no patient should undergo pulmonary embolectomy before the lesions have been demonstrated arteriographically.

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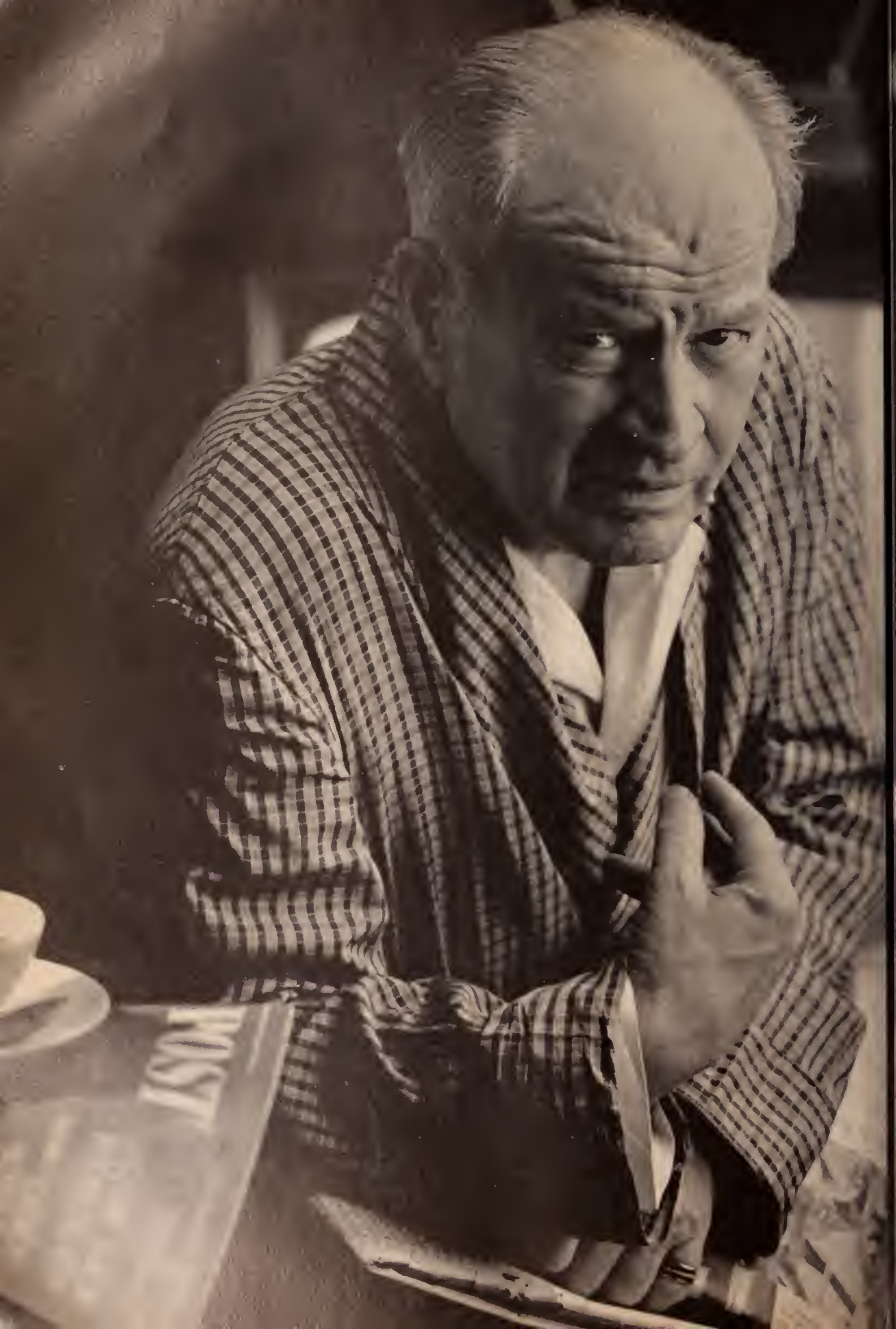
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With my heart?

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One measure, of course, is reassurance. Another, adjunctive measure, is EQUANIL (meprobamate).

Over a decade of experience has shown that EQUANIL (meprobamate) is generally well tolerated as well as effective. Side effects are usually limited to transient drowsiness; serious, therapy-interrupting side effects are rare.

Cautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use may result in dependence or habituation in susceptible persons—as ex-addicts, alcoholics, severe psychoneurotics. After prolonged high dosage, drug should be withdrawn gradually to avoid possibly severe withdrawal reactions including epileptiform seizures. Side effects include drowsiness and, rarely, allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute non-thrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. Meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Warn patients of possible reduced alcohol tolerance. Should drowsiness, ataxia, or visual disturbances occur, dose should be reduced. If symptoms persist, patients should not operate vehicles or dangerous machinery. A few cases of leukopenia, usually transient, have been reported following prolonged dosage. Other blood dyscrasias—aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia—have occurred rarely, almost always in the presence of known toxic agents. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. Prescribe very cautiously for patients with suicidal tendencies. Suicidal attempts should be treated with immediate gastric lavage and appropriate supportive therapy.

Contraindications: History of sensitivity to meprobamate.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

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WHY–

AFTER NEARLY 6 YEARS OF HOLDING THE LINE

NEW JERSEY BLUE SHIELD HAS TO HAVE A RATE INCREASE

Medical-Surgical Plan of New Jersey—which has not increased its rates in nearly six years—finally had to ask the Commissioner of Banking and Insurance for a premium increase under its basic Subscription Certificate.
Hospital Service Plan of New Jersey—our companion Blue Cross Plan—is not involved in the rate rise.

This is only the fourth rate increase sought by Blue Shield in over 24 years, since the Plan was founded. It will not affect the rates of extended benefit Riders, Medicare Complementary Programs for members aged 65 or over, Student Program, or special contracts, such as State and Federal Employee Programs, and experience-rated national accounts, which are currently rated, paying as they go on the basis of usage experienced by the group.
While Blue Shield has been holding the line on rates since 1961, several things have been happening.

People Have More Coverage. In the past 6 years, new benefits have been added to Blue Shield coverage . . . such as routine care of healthy newborn children, and various types of dental surgery in the hospital. Other benefits have been broadened to keep pace with medical advancement, for instance, introduction of an open heart surgery "package," and increased coverage of accidental injury treatment outside the hospital. Not one penny of additional premium has been charged for these.

People Are Making More Use of Their Coverage. Members' use of their Blue Shield protection has been going up, every year. In 1965 the number of cases paid, per thousand members, was 14% higher than in 1961. This has cost Blue Shield more, in dollars paid out in benefits per average member.

The Economy Has Been Spiralling Upward. No one needs to be reminded that the cost of virtually everything has gone up since 1961 . . . except the cost of Blue Shield protection. Even a non-profit organization has an operating overhead . . . though Blue Shield's is only 8.8% . . . and the Plan has had to pay more for its goods and services over the last five years, as well as paying more adequately for services rendered to members. Meanwhile, people have continued to pay the same rates for Blue Shield protection . . . protection that has been periodically upgraded.

Doctors' Services Are More Adequately Compensated. Until last year, there had been no general increase in Blue Shield allowances for doctors' services for seven years. Blue Shield fees fell behind those of neighboring non-profit plans, as well as the general medical economy. The Plan could not expect its Participating Doctors to continue accepting substandard payments and still extend Blue Shield's valuable paid-in-full service benefits to qualified members. Consequently, overdue adjustments were made in the fee schedule on October 1, 1965, which not only benefit subscribers who qualify for service benefits . . . by encouraging continued wide participation by doctors . . . but which also help subscribers in the higher income levels, by paying a larger portion of their medical bills.

What It All Adds Up To:

The simple economic fact is this: You can't pay out more than you take in.

Blue Shield has been forced to do this for some time, under existing rates.

It has been able to do so only by using up its reserves—funds used to pay benefits when payments exceed premium income.

But as of October 1, Blue Shield's reserves were just about exhausted—reduced to the equivalent of less than one day's operations.

These are the reasons why Blue Shield had to have a rate increase.

It could not continue to provide today's—and tomorrow's—protection at 1961 prices.

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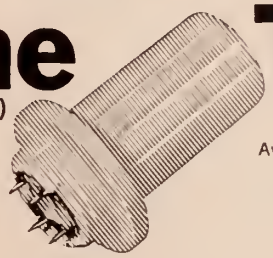
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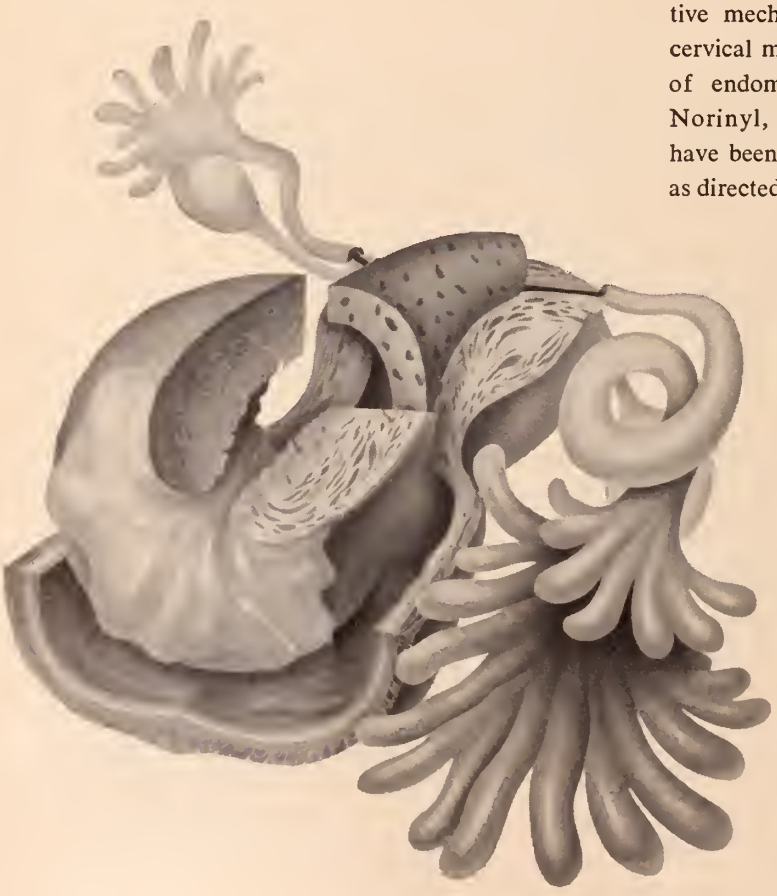
(norethindrone 2 mg. c mestranol 0.1 mg.)

for multiple contraceptive action that has produced a record of unexcelled effectiveness

inhibition of ovulation by means of 2 time-proved hormonal agents

production of a cervical mucus hostile to sperm motility and vitality

creation of an endometrium unreceptive to egg implantation



no unplanned pregnancies

Norinyl provides multiple action for maximum assurance of success. It does not depend on ovulation inhibition alone for contraceptive effectiveness. The mechanism of action of combined hormonal therapy results in ovulation inhibition reinforced by other protective mechanisms, including a hostile cervical mucus[1-13] and an acceleration of endometrial changes.[1-3,7-16] With Norinyl, no unplanned pregnancies have been reported to date when used as directed.

plus important supportive benefits that help her through those critical early months of oral contraception

low incidence of side effects
Low incidence of BTB and spotting, nausea and amenorrhea tends to minimize side effect problems and increases patient cooperation.

no confusion about dosage
An unbreakable "confusionproof" package makes it easy to adhere to prescribed dosage schedule: individually sealed tablets numbered from 1 through 20 *plus* monthly calendar record enables patient to double-check dosage intake by day and corresponding tablet number.



Contraindications: Thrombophlebitis or pulmonary embolism (current or past). Existing evidence does not support a causal relationship between use of Norinyl and development of thromboembolism. While a study which was conducted does not resolve definitively the possible etiologic relationship between progestational agents and intravascular clotting, it tends to confirm the findings of the Ad Hoc Advisory Committee appointed by the Food and Drug Administration to review this possibility. Cardiac, renal or hepatic dysfunction. Carcinoma of the breast or genital tract. Patients with a history of psychic depression should be carefully studied and the drug discontinued if depression recurs to marked degree. Patients with a history of cerebral vascular accident.
Warning: Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn.
Precautions: By May 1963, experience with norethindrone 2 mg.—mestranol 0.1 mg. had extended over 24 months. Through miscalculation, omission or error in taking the recommended dosage of Norinyl, pregnancy may result. If regular menses fail to appear and treatment schedule has not been adhered to, or if patient misses two menstrual periods, possibility of pregnancy should be resolved before resuming Norinyl. If pregnancy is established, Norinyl should be discontinued during period of gestation since virilization of the female fetus has been reported with oral use of progestational agents or estrogen. When lactation is desired, withhold Norinyl until nursing needs are established. Existing uterine fibroids may increase in size. In metabolic or endocrine disorders, careful clinical preevaluation is indicated. A few patients without evidence of hyperthyroidism had elevated serum protein-bound iodine levels, which in the light of present knowledge, does not necessarily imply hyperthyroidism. Protein-bound iodine increased following estrogen administration. Bromsulphalein retention has occurred in up to 25% of patients without evidence of hepatic dysfunction. Studies from 24-hour urine collections have shown an increase in aldosterone and 17-ketosteroids and decrease in 17-hydroxycorticoid levels. Thus, Norinyl should be discontinued prior to and during thyroid, liver or adrenal function tests. Because progestational agents may cause fluid retention, conditions such as epilepsy, migraine and asthma require careful observation. Thus far no deleterious effect on pituitary, ovarian or adrenal function has been noted; however, long-range possible effect on these and other organs must await more prolonged observation. Norinyl should be used with caution in patients with bone, renal or any disease involving calcium or phosphorus metabolism.
Side Effects: Intermenstrual bleeding; amenorrhea; symptoms resembling early pregnancy, such as nausea, breast engorgement or enlargement, chloasma and minor degree of fluid retention (if these should occur and patient has not strictly adhered to medication plan, she should be tested for pregnancy); weight gain; subjective complaints such as headache, dizziness, nervousness, irritability; in a few patients libido was increased. In a total of 3,090 patients, 2.2% discontinued medication because of nausea.
NOTE: See sections on contraindications and precautions for possible side effects on other organ systems.
Dosage and Administration: One Norinyl tablet orally for 20 days, commencing on day 5 through and including day 24 of the menstrual cycle. (Day 1 is the first day of menstrual bleeding.)
Availability: Dispensers of 20 and 60 tablets; bottles of 100.

References: 1. Council on Drugs. JAMA 187 664 (Feb. 29) 1964 2. Bryans, F. E.: Canad Med Ass J 92 287 (Feb 6) 1965. 3. Goldzieher, J. W.: Med Clin N Amer 48:529 (Mar.) 1964. 4. Cohen, M. R.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965. 5. Hammond, D. O.: Ibid. 6. Rice-Wray, E., Goldzieher, J. W., and Aranda-Rosell, A.: Fertil Steril 14:402 (Jul.-Aug.) 1963. 7. Goldzieher, J. W., Moses, L. E., and Ellis, L. T.: JAMA 180:359 (May 5) 1962 8. Kempers, R. D.: GP 29:88 (Jan.) 1964 9. Tyler, E. T.: JAMA 187 562 (Feb. 22) 1964 10. Rudel, H. W., Martinez-Manautou, J., and Maqueo-Topete, M.: Fertil Steril 16:158 (Mar.-Apr.) 1965. 11. Flowers, C. E., Jr.: N Carolina Med J 25:139 (Apr.) 1964. 12. Goldzieher, J. W.: Appl Ther 6:503 (June) 1964. 13. The Control of Fertility. Report adopted by the Committee on Human Reproduction of the American Medical Association. JAMA 194:462 (Oct. 25) 1965. 14. Flowers, C. E., Jr.: JAMA 188:1115 (June 29) 1964. 15. Merritt, R. I.: Appl Ther 6:427 (May) 1964 16. Newland, D. O.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965.

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New from Du Pont

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(Amantadine HCl)

The first oral chemical virostat for the prevention of influenza A_2



Influenza virus
Protein shell enclosing the core of nucleic acid (RNA)—artist's representation

The incidence of influenza A_2. In this country, where influenza is one of the leading causes of morbidity, influenza A_2 (Asian) continues to be a serious medical problem. In 1957 influenza A_2 was responsible for approximately 40,000 excess deaths in a three-month period. Since that year the most prevalent influenza virus has been A_2 (Asian).

What is Symmetrel®? "Symmetrel" (amantadine HCl) is a new synthetic chemical which acts as a molecular barrier to virus penetration. It provides for the first time specific oral medication for the prevention of respiratory infections caused by influenza A_2 (Asian) viruses—an entirely new approach in preventive medicine.

For prescribing information, see last page of this presentation

What Symmetrel® (amantadine HCl) means to you

...the first and only oral chemical agent to prevent influenza A_2 (Asian).

...not a vaccine or antibiotic, but a new synthetic chemical unrelated to any other chemotherapeutic agent.

...unique mode of action: prevents virus penetration of the host cell without affecting vital cell functions.

...specifically active against all influenza A_2 viruses tested to date.

...not indicated for the prevention of influenzal or respiratory illness other than influenza A_2 or for the treatment of established disease.

...does not interfere with normal antibody response; acts in concert with pre-existing antibody.

What Symmetrel® means to your patient

...possible immediate influenza A_2 protection when taken following suspected contact.

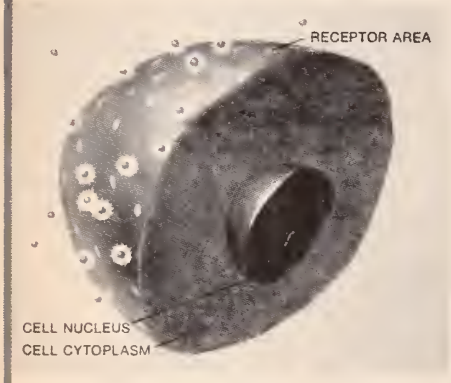
...may be particularly useful during outbreaks or epidemics and for high-risk patients in whom the occurrence of influenza A_2 is especially hazardous.

...a high degree of safety in clinical use.

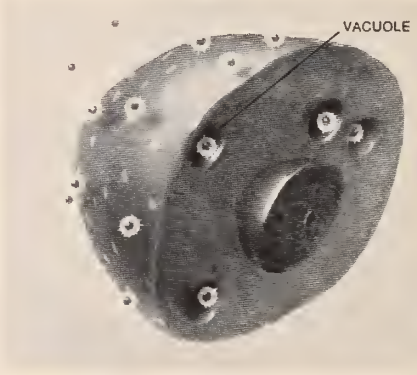
...simple once daily or b.i.d. dosage.

The mode of action of Symmetrel®

How the influenza virus invades and destroys the untreated cell



1 Viruses outside the cell attach themselves to specific cell receptor areas



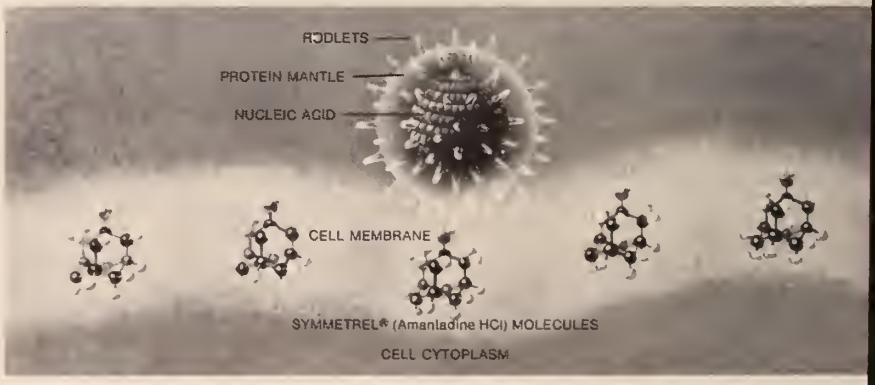
2 The virus is incorporated into a vacuole within the cell. From this vacuole the virus nucleic acid passes into the cell cytoplasm



3 The virus nucleic acid then directs the cell to produce both new virus nucleic acid and virus protein coat material which aggregate to form new virus particles. This process leads to the release of new virus particles and eventual destruction of the cell

How Symmetrel® (Amantadine HCl) prevents virus invasion[1]





Our current knowledge leads us to believe "Symmetrel" acts as a molecular barrier to influenza virus penetration. Shown here in a greatly enlarged section, "Symmetrel"—located at the cellular membrane—effectively prevents (blocks) virus penetration. Thus, "Symmetrel" does not directly destroy the virus particle but acting as a virostat prevents the cycle of virus penetration, virus replication, and cell destruction that is characteristic of virus invasion of animal cells (tissue). *Artist's conception based on current scientific knowledge.*

1. "Mode of Action of the Antiviral Activity of Amantadine in Tissue Culture", Hoffmann, C. E.; Neumayer, E. M.; Haff, R. F.; and Goldsby, R. A., Journal of Bacteriology *90*,623 (1965).

Safety of Symmetrel® Confirmed. When used as indicated, is generally well tolerated. No kidney, liver, bone marrow, or hematological disturbances have been observed.

Prescribing Information

Indications: "Symmetrel" is indicated for the prevention (prophylaxis) of influenza A_2 in persons of all age groups. Early use is recommended, preferably before or as soon as possible after actual or suspected contact with individuals suffering from influenza A_2. "Symmetrel" should especially be considered for high influenza-risk patient groups such as those suffering from chronic debilitating diseases and elderly persons.

Contraindications: Not indicated for the prevention of influenzal or respiratory illness other than influenza A_2 or for the treatment of established disease.

Warnings: Administration to patients with central nervous system disease, particularly geriatric patients with cerebral arteriosclerosis, and patients with a history of epilepsy or other "seizures," requires strict observation for possible untoward effects (see Adverse Reactions). Patients taking psychopharmacologic drugs, central nervous system stimulants, or alcoholic beverages should be observed for possible evidence of intolerance. Those patients who experience central nervous system effects or blurring of vision should be cautioned against driving or working in situations where alertness is important.

No teratogenic effects have been seen in reproductive studies in rats and rabbits. Studies in pregnant women have, however, not been done and use of this drug in women of childbearing age should be undertaken only after weighing the possible risks to the fetus against benefit to the pregnant patient. It should not be administered to nursing mothers since it is not known whether the drug is secreted in the milk.

Precautions: Ineffective against bacterial infections. Patients should be observed for idiosyncratic reactions as with all new drugs. Geriatric patients with pre-existing serious medical illnesses with mental or physical deterioration should be followed carefully medically while taking "Symmetrel." (See Adverse Reactions.)

Adverse Reactions: With higher than indicated doses manifestations of central nervous system effects such as nervousness, insomnia, dizziness, lightheadedness, drunken feeling, slurred speech, ataxia, inability to concentrate and some psychic reactions including depression and feelings of detachment were seen. Occasional blurred vision was reported at higher doses. Some of the milder and less pronounced symptoms above have been reported in a small number of patients taking the recommended dosage of 200 mg per day. Those were mostly transient and disappeared with continued administration of the drug. Some geriatric patients developed paranoid or hallucinatory behavior and became unmanageable while taking 200 mg daily. Medically unselected seriously deteriorated geriatric patients showed poor clinical tolerance after several weeks of daily dosing with 200 mg per day. One elderly patient with a history of prior cerebrovascular accident developed visual hallucinations and grand-mal convulsions while on drug at 800 mg per day. Some cases of dry mouth, gastrointestinal upset and skin rash and rarely, tremors, anorexia, pollakiuria, and nocturia have been also reported.

Safety: When used as indicated, is generally well tolerated. No kidney, liver, bone marrow, or hematological disturbances have been observed.

Dosage: *Adults:* Two 100 mg capsules (or 4 teaspoonfuls of syrup) as a single daily dose or the daily dose may be divided into one capsule of 100 mg (or 2 teaspoonfuls of syrup) twice a day.

Children: 1 yr.—9 yrs. of age: Calculate total daily dose on the basis of 2 mg to 4 mg per pound of body weight per day (but not to exceed 150 mg per day). Daily dose, given as the syrup, should be given in 2 or 3 equal portions.

9 yrs.—12 yrs. of age: Total daily dose 200 mg given as one capsule of 100 mg (or 2 teaspoonfuls of syrup) twice a day.

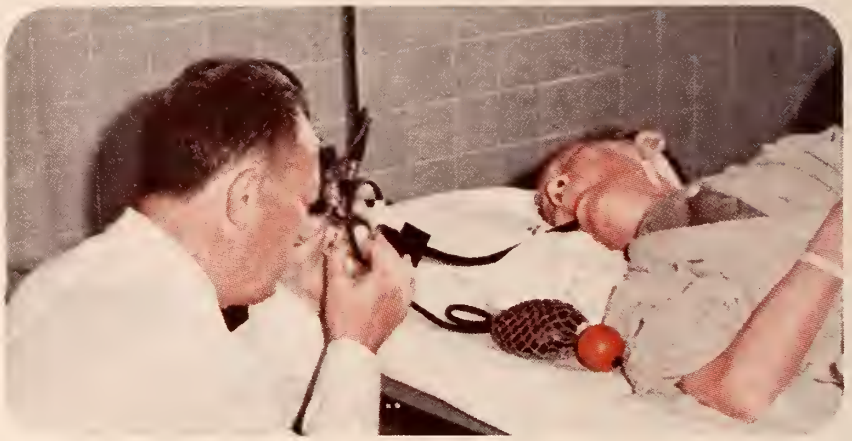
How Supplied: *Capsules:* Bottles of 100. Each red, gelatin capsule contains 100 mg amantadine HCl.
Syrup: Bottles of 1 pint. Each 5 ml (1 teaspoonful) contains 50 mg amantadine HCl.

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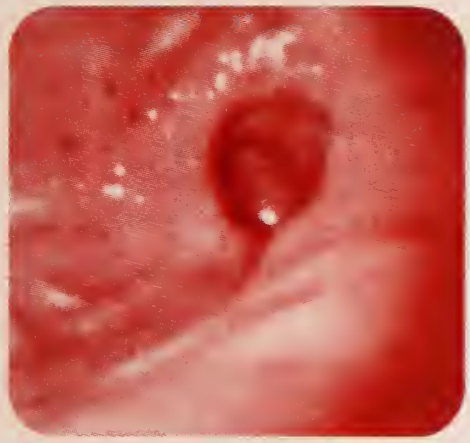
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gives positive, selective benefits in gastrointestinal disorders.



Intragastric photograph of pyloric region showing complete relaxation of pyloric sphincter with 6 mg. of Pro-Banthine intravenously.

AN IMPORTANT PROBLEM in managing gastrointestinal disorders has been the choice of an anticholinergic agent which will act positively and selectively on the gastrointestinal tract without extensive secondary effects.

Recent direct observations with the cinefibergastroscope and intragastric photography[1] visually confirm previous evidence that Pro-Banthine does, indeed, possess such selective activity.

Barowsky and his associates demonstrated that a minimal dose of 6 to 8 mg. of Pro-Banthine intravenously produced complete relaxation of gastric activity. Secondary effects were not significant.

By contrast, it required 0.8 mg. or double the usual dose of atropine intravenously to achieve similar gastric relaxation. Side effects of this dosage of the belladonna alkaloid were pronounced. Ventricular rates were as high as 150 per minute.

For positive, selective anticholinergic benefits Pro-Banthine is indicated in patients with peptic ulcer, gastritis, irritable colon and other forms of gastrointestinal hypermotility.

Dosage: The maximal tolerated dosage is usually the most effective. For most *adult* patients this will be four to six 15-mg. tablets daily in divided doses. In severe conditions as many as two tablets four to six times daily may be required. Pro-Banthine (brand of propantheline bromide) is supplied as tablets of 15 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type ampuls of 30 mg. The parenteral dose should be adjusted to the patient's requirement and may be up to 30 mg. or more every six hours, intramuscularly or intravenously.

Contraindications: In glaucoma or severe cardiac disease.

Precautions: Since varying degrees of urinary hesitancy may occur in the elderly male with prostatic hypertrophy, this should be watched for in such patients until they have gained some experience with the drug.

Although never reported, theoretically a curare-like action may occur with possible loss of voluntary muscle control. Such patients should receive prompt and continuing artificial respiration until the drug effect has been exhausted.

Side Effects The more common side effects, in order of incidence, are xerostomia, mydriasis, hesitancy of urination and gastric fullness.

1. Barowsky, H.; Greene, L.; Bennett, R., and Buganza, G.: The Effect of Anticholinergic Drugs on Gastric Motility and Pyloric Function, Scientific Exhibit, Annual Convention of the American Medical Association, Chicago, Illinois, June 26-30, 1966.

When the battle with bacteria is in the upper respiratory tract

Routes of invasion through the oral and nasal passages to the nasopharyngeal mucosa: artist's depiction of sagittal section of head in perspective.



consider Gantanol (sulfamethoxazole)



To rapidly help the patient win against upper respiratory infections

When the respiratory tract has been invaded, an antibacterial that can assure effective yet generally uncomplicated therapy is your first line of defense...an agent such as Gantanol (sulfamethoxazole), the wide-spectrum antibacterial from Roche.

Gantanol (sulfamethoxazole) is effective against common susceptible upper respiratory pathogens, both gram-positive and gram-negative. Acting at foci of bacterial invasion, Gantanol (sulfamethoxazole) promptly helps control most infections, yet usually presents few problems to patients. Dosage is convenient and provides a measure of economy.

Before prescribing, please consult complete product information, a summary of which follows:

Contraindicated in sulfonamide-sensitive patients, pregnant females at term, premature infants, or newborn infants during first three months of life.

Warnings: Use only after critical appraisal in patients with liver damage, renal damage, urinary obstruction or blood dyscrasias. If toxic or hypersensitivity reactions or blood dyscrasias occur, discontinue therapy. In intermittent or prolonged therapy, blood counts and liver and kidney function tests should be performed.

Precautions: Observe usual sulfonamide therapy precautions, including maintenance of an adequate fluid intake. Use with caution in patients with histories of allergies and/or asthma. Patients with impaired renal function should be followed closely since renal impairment may cause excessive drug accumulation. Occasional failures may occur due to resistant microorganisms. Not effective in virus or rickettsial infections.

Adverse reactions: Headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, Stevens-Johnson syndrome, injection of the conjunctiva and sclera, petechiae, purpura, hematuria or crystalluria may occur, in which case the dosage should be decreased or the drug withdrawn.

Dosage: Adults—4 tablets initially, then 2 tablets b.i.d. or t.i.d. depending upon severity of infection. Children—1 tablet/20 lbs initially, followed by ½ tablet/20 lbs b.i.d.

How supplied: Tablets, 0.5 Gm, bottles of 50.

Roche Laboratories, Division of Hoffmann-La Roche Inc., Nutley, N. J. 07110

When there are bacterial invaders in the upper respiratory tract

Gantanol®
(sulfamethoxazole)

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...but doctor, I eat like a bird!



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This combination of amphetamines may be useful as an adjunct in the management of certain forms of obesity where an appetite depressant is indicated.

CONTRAINDICATIONS: Hypertension, advanced arteriosclerosis, coronary artery disease, cardiac arrhythmias, peripheral vascular disease, states of undue restlessness, anxiety, excitement, agitated depression, hyperthyroidism, idiosyncrasy to amphetamine, concomitant administration of a monoamine oxidase inhibitor. PRECAUTIONS: Use with caution in individuals with anorexia, insomnia, vasomotor instability, asthenia, psychopathic personality, a history of homicidal or suicidal tendencies, and individuals who are known to be hyperreactive to sympathomimetic agents, or emotionally unstable individuals who are known to be susceptible to drug abuse. Certain monoamine oxidase inhibitors may potentiate the action of Obetrol. SIDE EFFECTS: The most common side effects attended with the use of amphetamines include nervousness, excitability, euphoria, insomnia, dryness of mouth, nausea, vertigo, constipation, and headache. DOSAGE AND ADMINISTRATION: Initial adult dose is one-half to one 'Obetrol-10' tablet daily, preferably one-half to one hour before meals. This may be gradually increased to one 'Obetrol-10' or 'Obetrol-20' tablet one to three times daily as indicated. SUPPLIED: Tablets scored, in bottles of 100, 500, and 1000.

REQUEST SAMPLES AND LITERATURE

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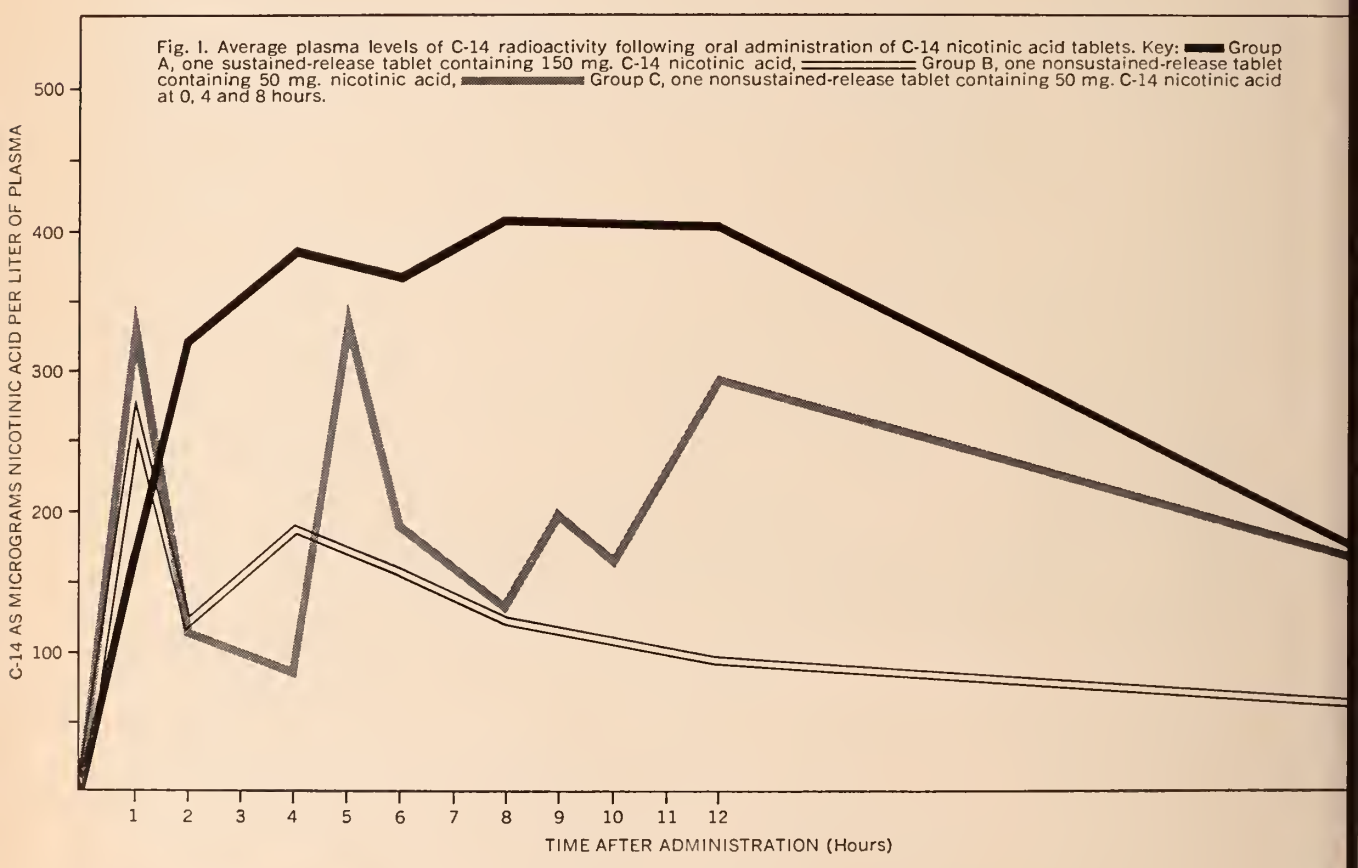


Fig. I. Average plasma levels of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: ▬ Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, ═══ Group B, one nonsustained-release tablet containing 50 mg. nicotinic acid, ▬▬ Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.



(fewer absent doses by absent-minded patients)

Human volunteer subjects were administered Geroniazol TT tablets with the nicotinic acid component made radioactive with C-14. Plasma and urine samples were analyzed. (See Figures I and II) The radioactive tracer study substantiated the previous clinical evidence that the release of nicotinic acid from the Geroniazol TT tablet produced a gradual rise in plasma levels to a plateau for a total of 12 hours and more.

Such proven sustained activity makes the management of geriatric patients much easier by minimizing the possibility of neglected doses through absent-mindedness or senile confusion. Therapy *can* be con tinuous on a daily dose of only one Geroniazol TT tab let every 12 hours.

The gradual release of nicotinic acid in Geroniazo TT will provide the well-known peripheral vasodilata tion needed in patients with deficient circulation an with a minimum amount (if any) of "flushing." Also cerebrovascular circulation is complemented by pen tylenetetrazol, long-established as a cerebral and res piratory stimulant.

Geroniazol TT improves the typical, unfortunate signs of senile confusion. Patients become more alert

ged and debilitated

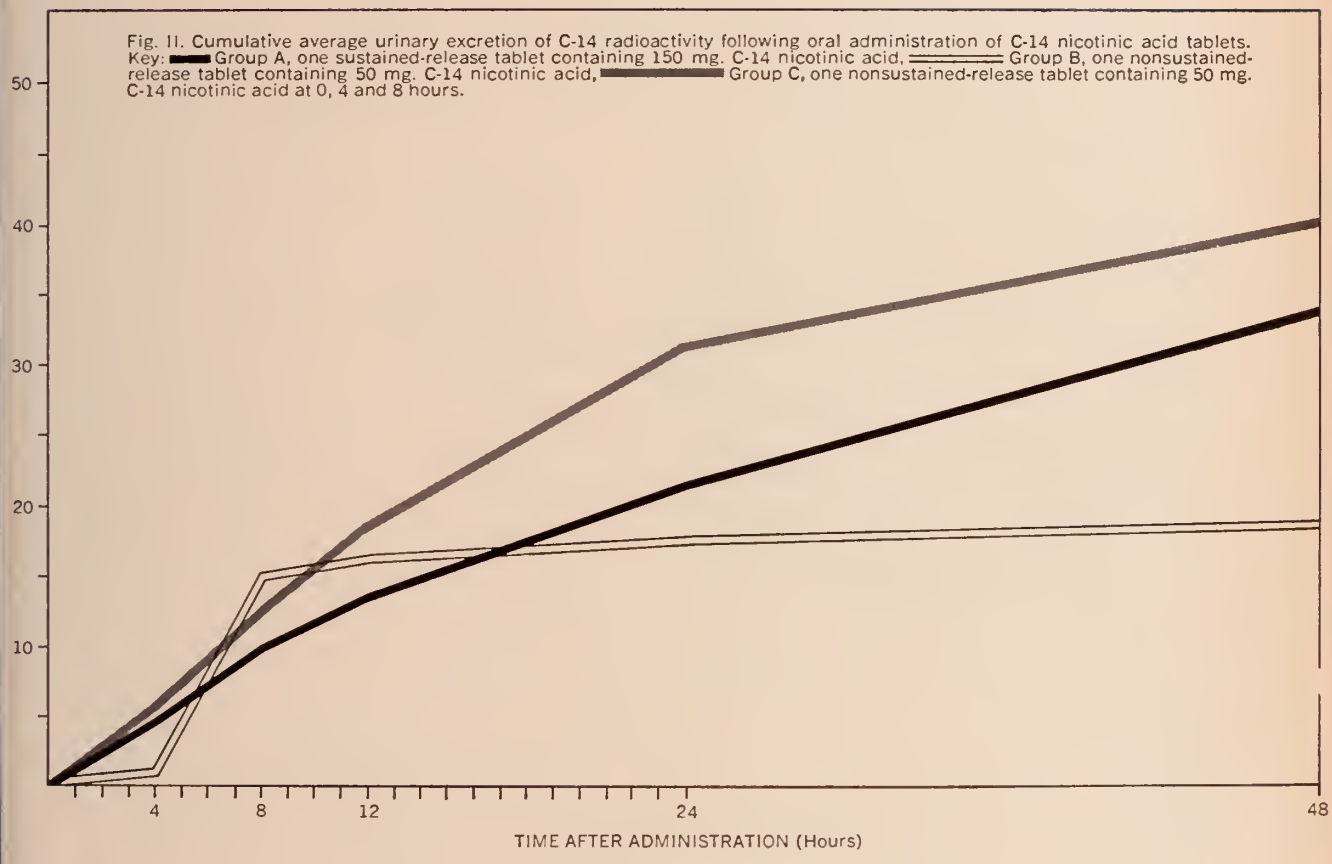


Fig. II. Cumulative average urinary excretion of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: ▬ Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, ═══ Group B, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid, ▬▬ Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.

es confused and moody. Personal care, memory, notional stability, social attention improve. Fatigue, athy and irritability are reduced.

A prescription for 100 tablets of Geroniazol TT will rmit your patients to enjoy the benefits of time-olonged nicotinic acid/pentylenetetrazol therapy, an economical price. Dosage is only one tablet every hours.

ntraindications: There are no known contraindica-ns.

recautions: Exercise caution when treating patients th a low convulsive threshold.

Side Effects: Side effects are rarely encountered, however due to the vasodilatation effect of nicotinic acid, transitory mild nausea, flushing, tingling and pruritus are possible.

Dosage: One tablet every 12 hours.

Supplied: Prescribe bottles of 100 tablets, to take advantage of recent price reduction.

References: 1. Report by Nuclear Science & Engineering Corp., Pittsburgh, Pa., in files of Philips Roxane Laboratories. 2. Connolly, R.: W. Virginia Med. J. *56*:263 (Aug.) 1960. 3. Curran, T. R., and Phelps, D. K.: Am. Pract. & Digest Treat. *11*:617 (July) 1960.

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The fast-disintegrating uncoated tablet gives relief in 15 minutes

Each tablet contains:

Potassium Iodide	195 mg.
Aminophylline	130 mg.
Phenobarbital, Caution: May be habit forming	21 mg.
Ephedrine HCl	16 mg.

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Precautions: Usual for aminophylline-ephedrine-phenobarbital. Iodides may cause nausea, long use may cause goiter. Discontinue if symptoms of iodism develop.

Iodide contraindications: tuberculosis, pregnancy.

DOSAGE

One tablet, with full glass of water, 3 or 4 times daily.

Dispensed in bottles of 100 and 1000 tablets.

MUDRANE GG—Formula, dosage and package identical to Mudrane—*except*—100 mg. glyceryl guaiacolate replaces the potassium iodide. The value of Mudrane cannot be enjoyed by a small group in which K.I. is contraindicated. Mudrane GG is prepared for this group.

MUDRANE GG ELIXIR—Four 5 cc teaspoonfuls is equivalent to one Mudrane GG tablet. Dosage adjusted to age and weight of child. Mudrane GG Elixir is for pediatric patients and those who think they cannot swallow tablets. Dispensed in pint and half gallon bottles.

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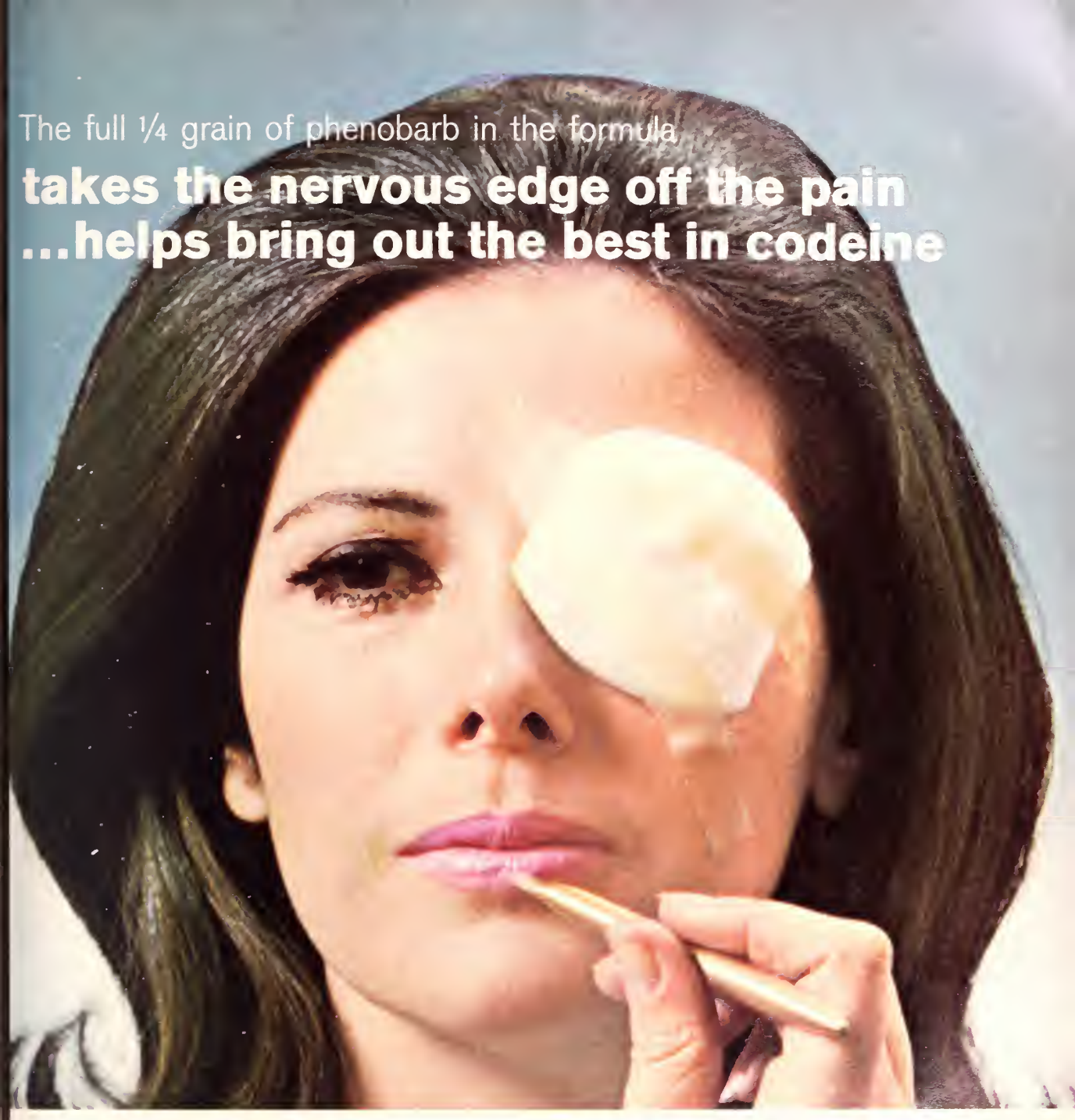
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Hyoscyamine sulfate .....0.031 mg.
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(Warning: may be habit forming)

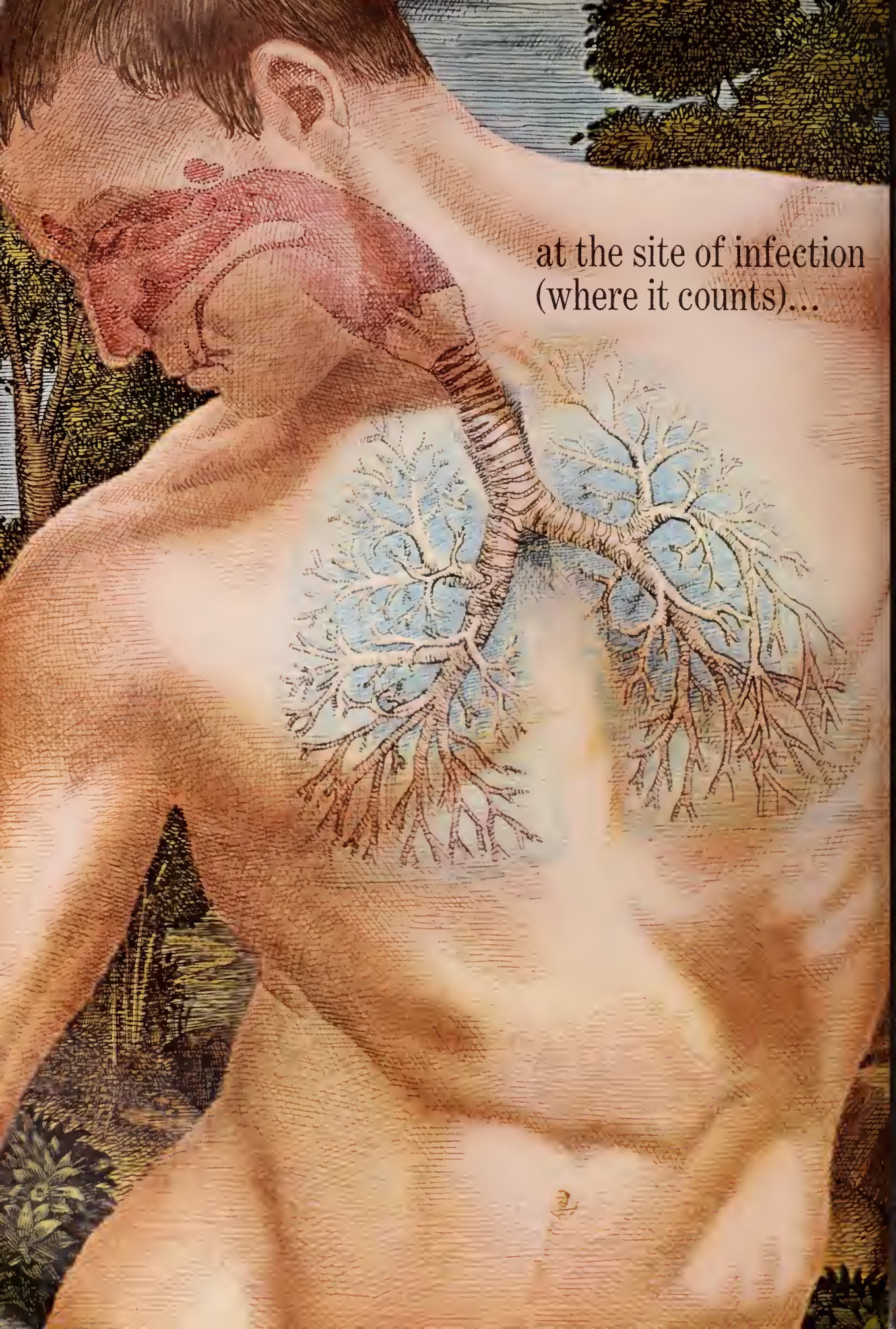
Contraindications: Hypersensitivity to any ingredient.

Precautions: As with all phenacetin-containing products, avoid excessive or prolonged use.

Side Effects: Side effects are uncommon—nausea, constipation, and drowsiness have been reported.

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at the site of infection
(where it counts)...

Ilosone® provides more antibacterial activity than any other oral erythromycin

Acid stable, better absorbed ... Ilosone produces faster, higher, more prolonged blood levels, even in the presence of food[1-3]

Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.[1,2] Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.[1,3]

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

700121

Ilosone®
Erythromycin Estolate

Lilly

(See next page for prescribing information.)

Ilosone®/ the most active oral form of erythromycin

Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci in culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone.

Contraindications: Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with preexisting liver disease or dysfunction.

Side-Effects: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have appeared in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly if the drug is readministered to sensitive patients, usually within forty-eight hours. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to be definitely related to use of the drug, laboratory findings were characterized by increased direct-reacting bilirubin, elevated alkaline phosphatase levels, negative or weakly positive cephalin flocculation and thymol turbidity tests, elevated serum glutamic oxalacetic transaminase levels, peripheral eosinophilia, and normal cholecystograms.

Individual idiosyncrasy seems evident since jaundice has not been reported in other patients taking prolonged courses of the medication. Patients with chronic infection have been given 1 to 2 Gm. of the drug daily for periods of two to six months, and patients with rheumatic fever have taken prophylactic doses of 0.5 Gm. daily for two years without difficulty. In one group of 144 patients who received the drug daily for two years, no jaundice was noted. It was of interest that members of six of the patients' families, who were not taking the drug, had episodes of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels were determined in a group of fifty-four adults and children who took 250 mg. of Ilosone daily for an average of sixteen months for rheumatic fever prophylaxis. The results were compared with those of a similar group of forty-four patients who received penicillin. There were no cases of jaundice in either group. Elevation of SGPT and serum alkaline phosphatase levels during the course of treatment was observed in one patient treated with Ilosone and in two patients treated with penicillin. Seven other patients in the group receiving Ilosone and four others in the penicillin group showed elevations in one of the tests at some time during administration of the drugs.

Very satisfactory therapeutic results, without toxicity, were reported in 102 pediatric patients who received short-term (ten-day) courses of Ilosone in the treatment of streptococcus infections. Results of liver function tests in these patients were comparable to those in a similar control group who had received penicillin.

Gastro-intestinal disturbances not associated with hepatic effects are observed in a small proportion of individuals as a result of a local stimulating effect of the medication on the alimentary tract; however, the normal intestinal gram-negative bacterial flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with the use of erythromycin, there have been occasional reports of urticaria, skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally.

Ilosone Pulvules®
Ilosone Chewable Tablets
Ilosone Drops
Ilosone, 125, for Oral Suspension

For infants and for children under twenty-five pounds of body weight, the usual dosage is 5 mg. per pound every six hours; for children twenty-five to fifty pounds, 125 mg. every six hours. (Tablets Ilosone Chewable should be chewed or crushed and swallowed with water.)

For adults and for children over fifty pounds, the usual dosage of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythromycin therapy should be considered.

In the treatment of syphilis, the recommended total dosage is 20 to 30 Gm. given in divided doses for a period of ten to fifteen days. Close follow-up of the patient is necessary since erythromycin drugs have not had adequate evaluation in all stages of syphilis. Examinations of spinal fluid are recommended as part of the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four days are recommended. In the treatment of gonorrhea, patients with a suspected lesion of syphilis should have a dark-field examination before receiving antibiotics, and monthly serologic tests should be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and 250 mg. (equivalent to base), in bottles of 24 and 100.

Tablets Ilosone Chewable, N.F., 125 mg. (equivalent to base) in bottles of 50.

Ilosone Drops, 5 mg. (equivalent to base) per drop, in 10-cc. size packages, with dropper calibrated at 25 and 50 mg.

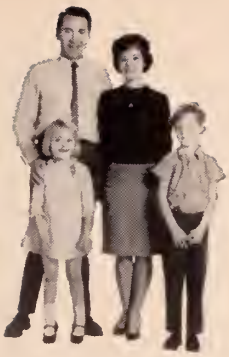
Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equivalent to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size packages.

References: 1. Griffith, R. S., and Black, H. R.: Am. J. M. Sc., *247*:69, 1964.
2. Griffith, R. S., and Black, H. R.: Antibiotics & Chemother., *12*:398, 1962.
3. Hirsch, H. A., Pryles, C. V., and Finland, M.: Am. J. M. Sc., *239*:198, 1960.

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1. Bradley, J. E., *et al.*: J. Pediat. *38*:41 (Jan.) 1951.
2. Bradley, J. E.: Mod. Med. *20*:71 (Oct. 15) 1952.
3. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. *65*:311 (Feb.) 1953.



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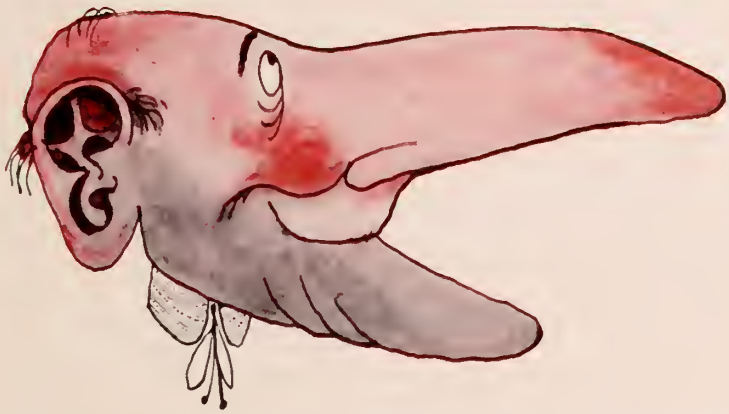
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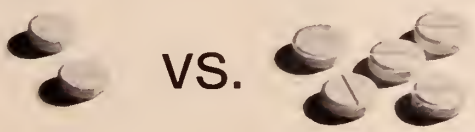
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*Brest, A. N., et al.: J. New Drugs 5:329, 1965.



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Side Effects: Dizziness, weakness, nausea, vomiting, hyperglycemia, hyperuricemia, headache, muscle cramps, postural hypotension, constipation, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin reactions, including urticaria and purpura, epigastric pain, or G.I. symptoms after prolonged administration.
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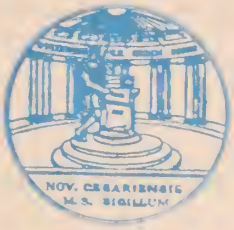
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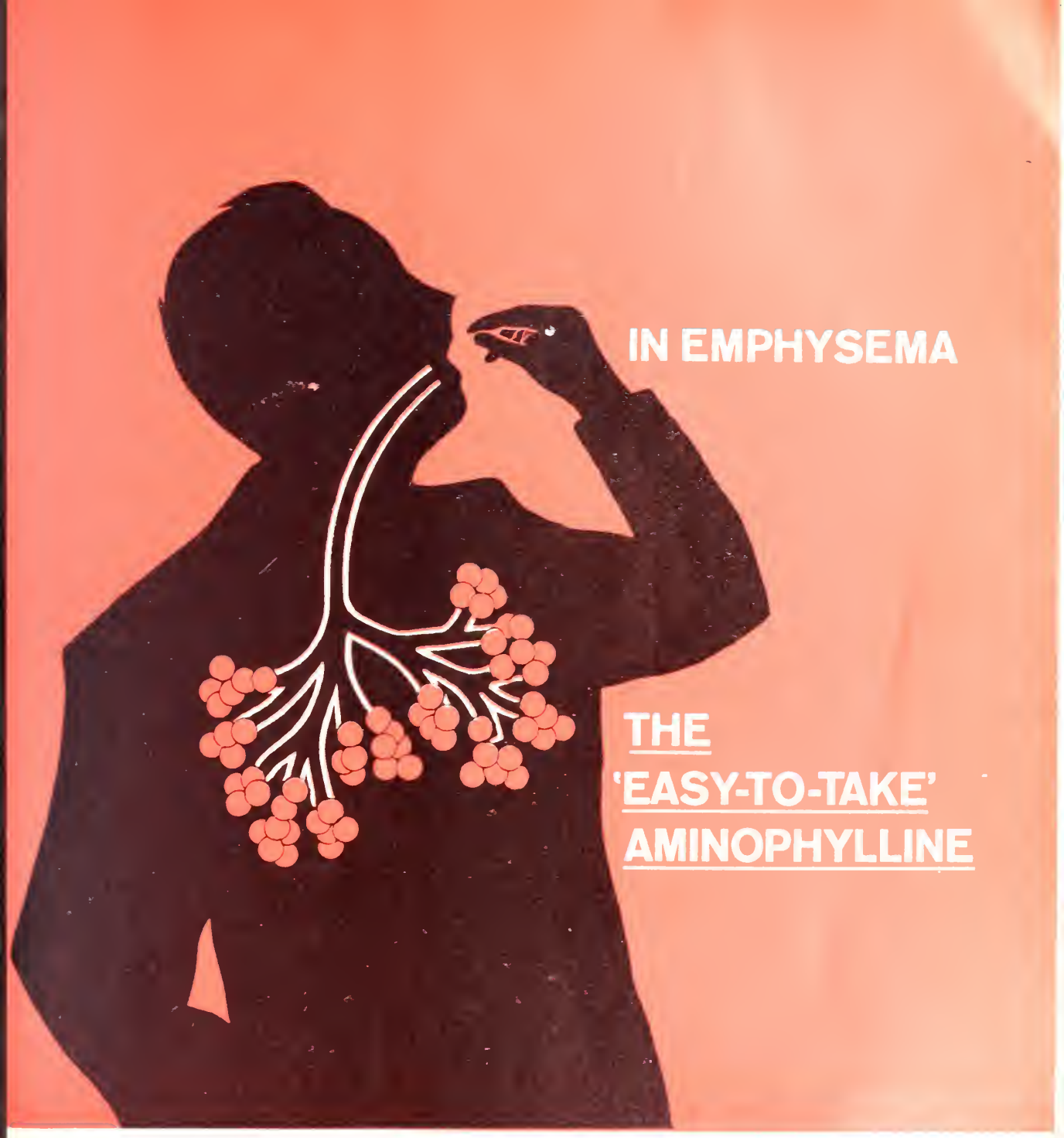
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Just look at them and you can see how much they have in common. Besides, they all go through pretty much the same training, and pass the same kinds of tests, and measure up to the same sort of standards. Therefore, all otolaryngologists are alike. Right?

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*Miller, I. W., and Lowell, F. C.: New England J. Med. 261:478, 1959.

Contraindications: Patients hypersensitive to antihistamines. Not recommended for use during pregnancy.

Precautions: Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.

Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability, or excitement may be encountered.

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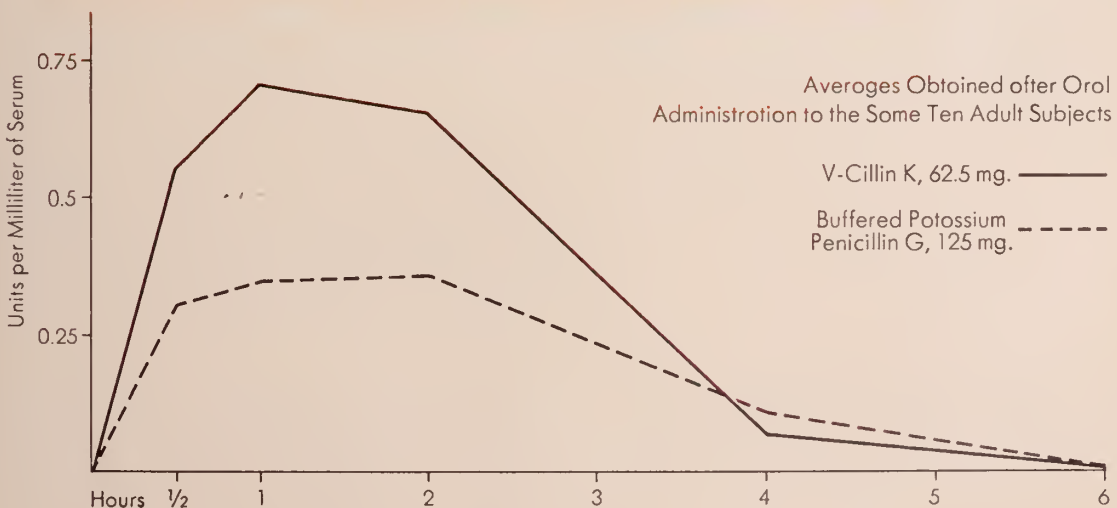
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Penicillin V	0.02	0.02-0.04	0.02	0.003-0.4	0.01	0.005-0.2
Penicillin G	0.02	0.005-1.6	0.005	0.002-0.2	0.02	0.01-0.1
Methicillin	1.6	0.4-6.3	0.2	0.1-0.4	0.2	0.1-1.6
Oxacillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Cloxocillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nofcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

Adapted from Klein, J. O., and Finland, M. New England J. Med. 269 1019, 1963.

with high blood levels, even in the presence of food



Adapted from Griffith, R. S., and Black, H. R. Current Ther. Res., 6 253, 1964.

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Lilly 700157

Potassium Phenoxymethyl Penicillin

(See next page for prescribing information

New 500 mg. tablets...a more convenient way to give high doses



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V-Cillin K Pediatric, is an oral solution of clinically proved V-Cillin K in teaspoon dosage form. When mixed as directed, each 5 cc. (approximately one teaspoonful) will contain 125 mg. (200,000 units) phenoxymethyl penicillin as the potassium salt.

Indications: V-Cillin K has been shown to be effective in the treatment of streptococcus, pneumococcus, and gonococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy and tooth extraction in those patients with a history of rheumatic fever or congenital heart disease.

Contraindication: V-Cillin K should not be administered to a patient with a history of penicillin hypersensitivity.

Precautions: V-Cillin K should be used cautiously, if at all, in a patient with a strongly positive history of allergy. Reactions occur more frequently in individuals with bronchial asthma or other allergies or in those who have previously demonstrated sensitivity to penicillin. If hypersensitivity reactions occur, the drug should be discontinued.

Adverse Reactions: Although serious allergic reactions are much less common with administration of oral penicillin than with intramuscular forms, skin rash, symptoms resembling those of serum sickness and other manifestations of penicillin allergy may occur. When penicillin is administered, measures for treating anaphylaxis should be readily available. Those include epinephrine, oxygen, and pressor drugs for relief of immediate allergic manifestations as well as antihistamines and corticosteroids for delayed effects.

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How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units), bottles of 50 and 100, 250 mg. (400,000 units), and 500 mg. (800,000 units) in bottles of 24 and 100.

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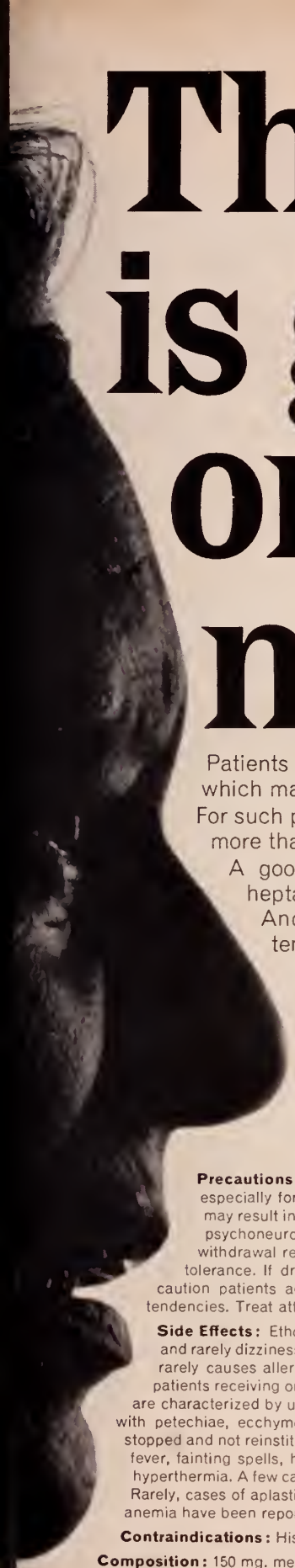
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Precautions: Keep out of reach of children. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use of meprobamate may result in dependence or habituation in susceptible persons—as ex-addicts, alcoholics, severe psychoneurotics. Withdraw gradually after prolonged high dosage to avoid possibly severe withdrawal reactions including epileptiform seizures. Warn patients of possible reduced alcohol tolerance. If drowsiness, ataxia or visual disturbances occur, reduce dose. If symptoms persist, caution patients against operating machinery or driving. Give cautiously to patients with suicidal tendencies. Treat attempted suicide with immediate gastric lavage and appropriate supportive therapy.

Side Effects: Ethoheptazine and aspirin may occasionally cause nausea, vomiting, epigastric distress, and rarely dizziness and CNS depression. Overdosage may result in salicylate intoxication. Meprobamate rarely causes allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. Meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioedema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. A few cases of leukopenia, usually transient, have been reported following prolonged dosage. Rarely, cases of aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis, and hemolytic anemia have been reported; almost always, in the presence of known toxic agents.

Contraindications: History of sensitivity or severe intolerance to aspirin or meprobamate.

Composition: 150 mg. meprobamate, 75 mg. ethoheptazine citrate and 250 mg. aspirin per tablet.

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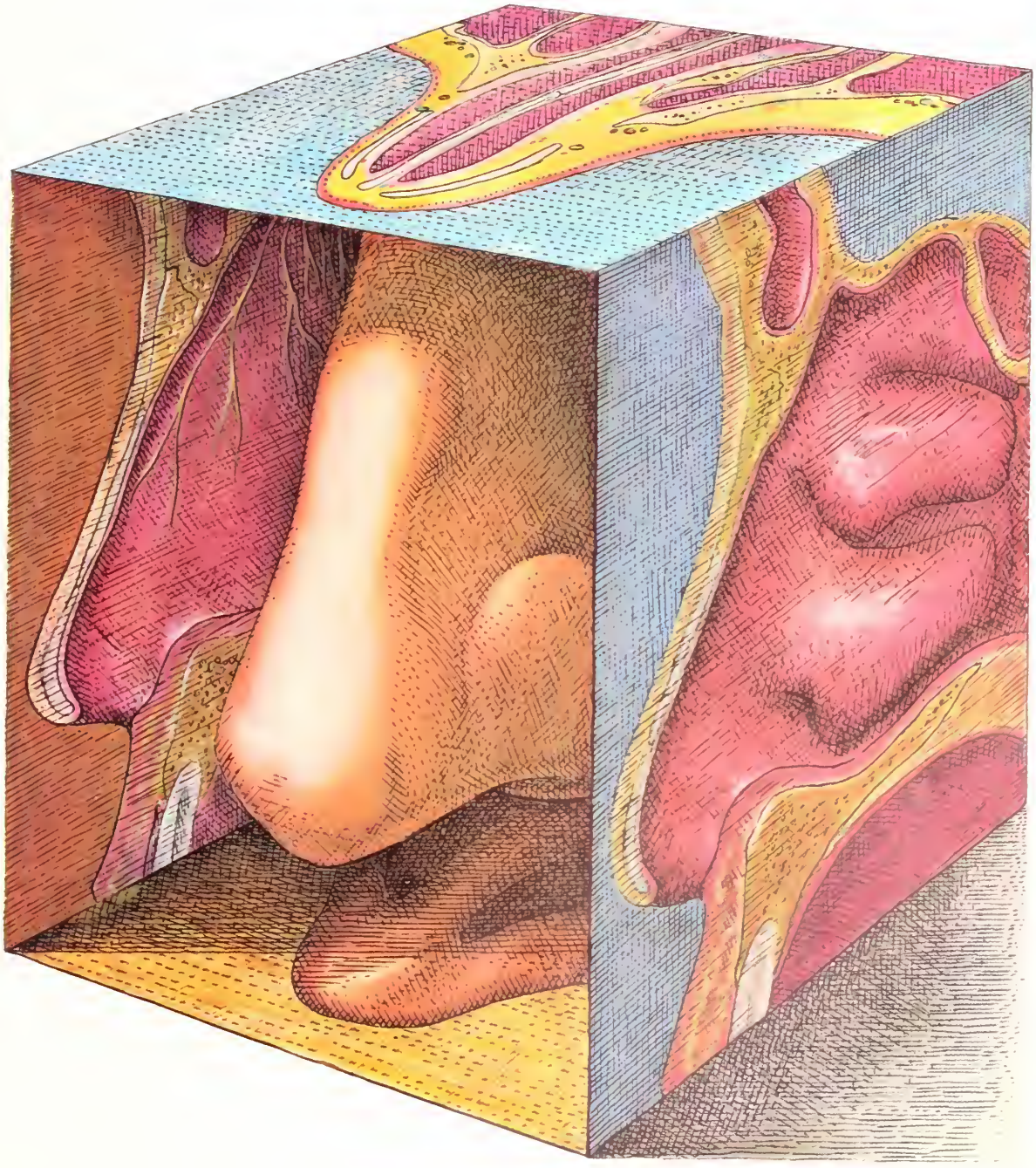
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this issue: the ubiquitous world of summer allergies



the ubiquitous world of summer allergies

Donald L. Unger, M.D. • Clinical Assistant Professor, Department of Medicine (Allergy), Stritch School of Medicine (Loyola).

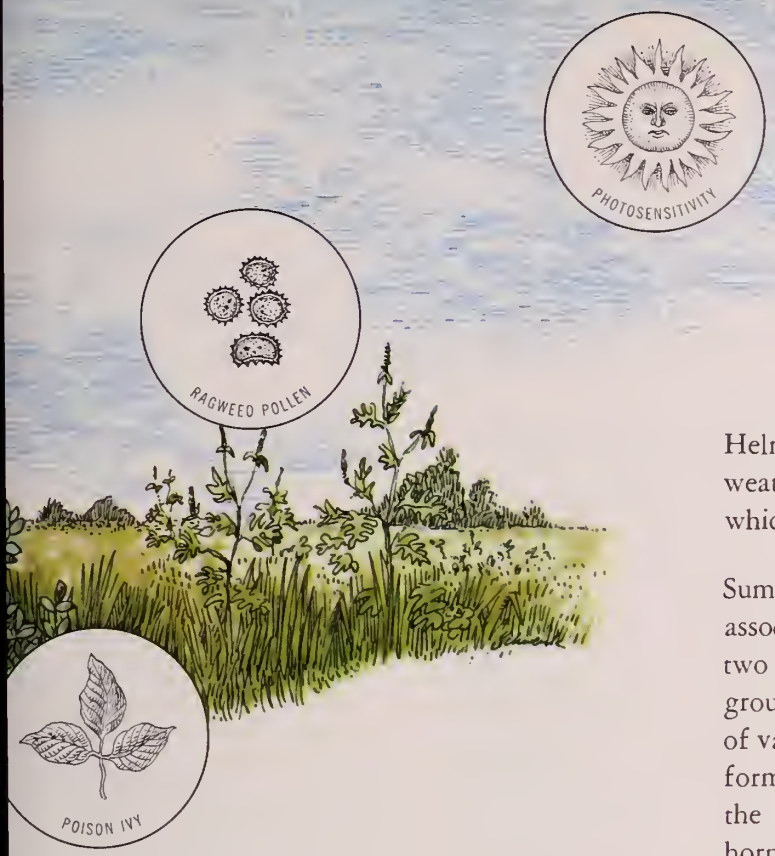
In the Spring a young man's fancy lightly turns to thoughts of—allergies. This is at least true of the 10% of the population who have hay fever and the 4% who have asthma.[1] The snow melts, the trees blossom and the noses run. Patients who were fine all winter may not be enthralled by the sight of the first robin or the blossoming of a crocus, for their appearances may precede the "sneezin' season."

Allergies in general can be divided into winter allergies and summer allergies. In the winter the main problems are inside the house: e.g. dogs, cats, dust and feathers. Houses in the northern half of the country become so dry that it becomes essential to add humidity to the home; this is a far cry from the damp summer months with the moldy basements and need for dehumidifiers.

Early in April trees begin to pollinate, with each tree having about a two week period of pollination. A particular patient may be sensitive to only one tree and thus have his hay fever for such a short time that he thinks he has a cold.[2] The entire tree season starts about April 1 and ends about Memorial Day, although all hay fever seasons are blurred and prolonged in the southern part of the country. Tree pollen is usually very heavy and a person may well have most of his exposure from those trees immediately surrounding his home.

Grasses pollinate from about May 15 until July 4, and cause "rose fever." Grass pollens are somewhat lighter and more buoyant than tree pollens, and are much more ubiquitous. While there are several varieties of grasses in the United States, they are so closely related antigenically that a person sensitive to one is generally sensitive to them all.[3] Thus, while the tree season is really several small seasons intertwined, the grass season will usually result in symptoms for a more prolonged period. Obviously, a grass-sensitive patient will have trouble only when grass is pollinating—he will have to think of another excuse not to mow the lawn after July 4.

Ragweed is the "Big Daddy" of them all in the eastern two-thirds of the country. Pollination is generally from mid-August until the end of September, with the predicted lower counts and longer seasons



in the southern part of the country. Ragweed is a very light pollen which may be windborne for hundreds of miles. An interesting study was made in New York City, in which 90% or more of the ragweed plants were destroyed in three of the five boroughs; pollen counts done during the season were virtually identical in all five.[4]

Ragweed is, of course, the most common cause of hay fever and is associated with an incredible loss of man hours from work each year. Many is the patient who travels to areas where the pollen count is low, just to avoid having symptoms. There is no ragweed anywhere in the world except the United States and portions of Canada and Mexico.

While molds are present through the year, the most important ones predominate from April until November. An old wives' tale has ragweed ending with the first frost, when actually it ends a good month earlier. It is Alternaria—the kingpin of the molds—that meets a sudden demise with the first frost. Alternaria-sensitive patients are in their glory when there is snow on the ground, and might be ideally suited to man the radar stations in Alaska. In September and October, Alternaria counts are at their highest, perhaps associated with the burning of leaves. Other molds such as Hormodendrum and Helminthosporium are associated with the warmer weather, as opposed to Penicillium and Aspergillus which are household molds.

Summer also means the return of our much maligned associates—bugs. Insects cause allergic symptoms by two methods: the bite or sting of the Hymenoptera group, and the inhalation of particles of the bodies of various insects. Wasp stings are the oldest known form of allergy, as they caused the death of one of the pharaohs in ancient Egypt.[5] Bees, wasps and hornets account for many deaths in this country, and those sensitive to them should carry special treatment kits at all times; a few minutes delay in the administration of epinephrine to such a patient, might be the difference between life and death. Inhalation of particles of insects may cause sneezing and wheezing in a susceptible individual.[6] Both of these forms of insect allergy may be benefitted by hyposensitization.

The insect recognizes no professional bounds. He is as apt to bite the physician as the patient. So this season, beware of bugs. And beware, too, of poison ivy. That pleasant stroll through the woods and underbrush with the Boy Scouts might turn into a

(Concluded on following page)

to relieve summer allergies

Triaminic®

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nightmare for the botanically uninitiated in the causes of rhus dermatitis (poison ivy, poison oak and poison sumac). Although you may have been careful, your dog may not have noted that it wasn't clover he jumped through, but poison ivy. His return to your side may give you the rhus dermatitis that you so carefully avoided. That heavenly campfire may be emitting particles of rhus oil to produce an airborne contact dermatitis of the exposed areas of the body.

Another fascinating, but rather infrequent type of summer allergy is physical allergy. Some people sneeze on exposure to sunlight, while others break out in rashes, usually on the exposed parts of the body. These rashes may well follow the administration of various photosensitizing drugs, e.g. demethylchlortetracycline.[7] Another form of physical allergy and one that may be lethal in the summer, is cold allergy. Yes, I mean cold allergy, not heat allergy. The cool dip on a hot day with its consequent sudden chilling of the body, may be the coup de grace for a cold sensitive patient.[8] It is customary to write "heart attack" on the death certificate, even though the victim may have been an 18-year-old boy who looks like a Greek god.

Lest the reader be depressed by this saga of afflictions associated with the warmer months, perhaps he should remember that it is also a time for swimming, baseball, lying in the sun and taking that long-planned vacation. So let's all join in a chorus of "In the Good Old Summertime," as we sneeze, wheeze and scratch. Be careful of your suntan lotion, however; it may cause you a contact dermatitis.

References 1. Unger, L.: Bronchial asthma. Charles C. Thomas Co. p. 47, 1946. 2. Samter, M.: Immunological diseases. Little, Brown and Co. p. 513, 1965. 3. Wodehouse, R. P.: Antigenic analysis by gel diffusions: 2. Grass pollen. Int. Arch. Allerg. **6**:65, 1955. 4. Cohart, E. M., and Kandle, R. P.: The Effects of a ragweed control program on ragweed pollen counts, J. Allergy **30**:287, 1959. 5. Woddell, L. S.: Egyptian civilization: Its origin and real chronology and Sumerian origin of Egyptian hieroglyphics. London: Luzak & Co. 1930. 6. Parlato, S. J.: The sandfly (Caddis fly) as an exciting cause of allergic coryza and asthma: II. Its relative frequency. J. Allergy **1**:307, 1930. 7. Ozere, R. L.: Demethylchlortetracycline photosensitivity. Canad. M. A. J. **85**:1199, 1961. 8. Horton, B. T., Braun, G. E., and Roth, G. M.: Hypersensitiveness to colds, JAMA **107**:1263, 1936.

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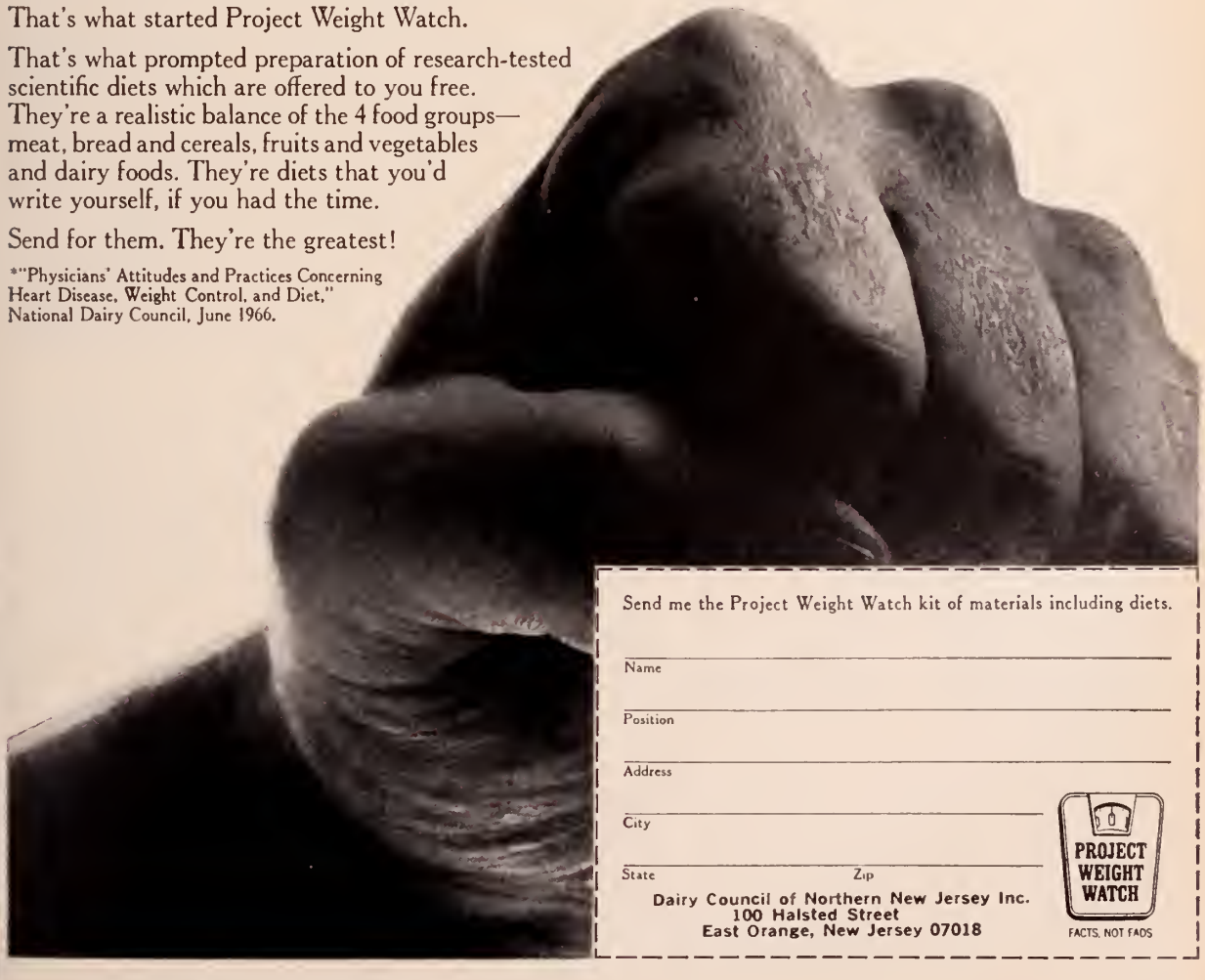
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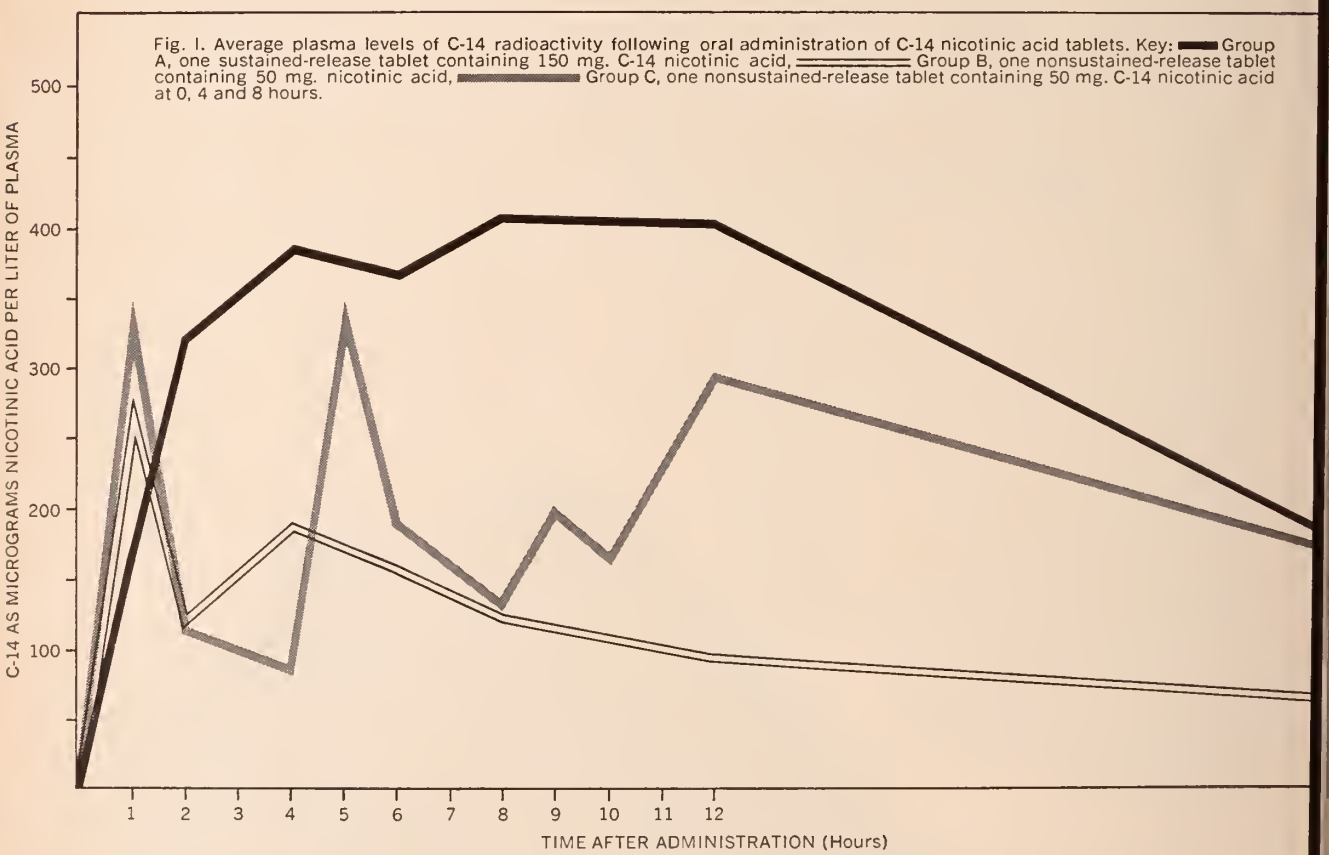
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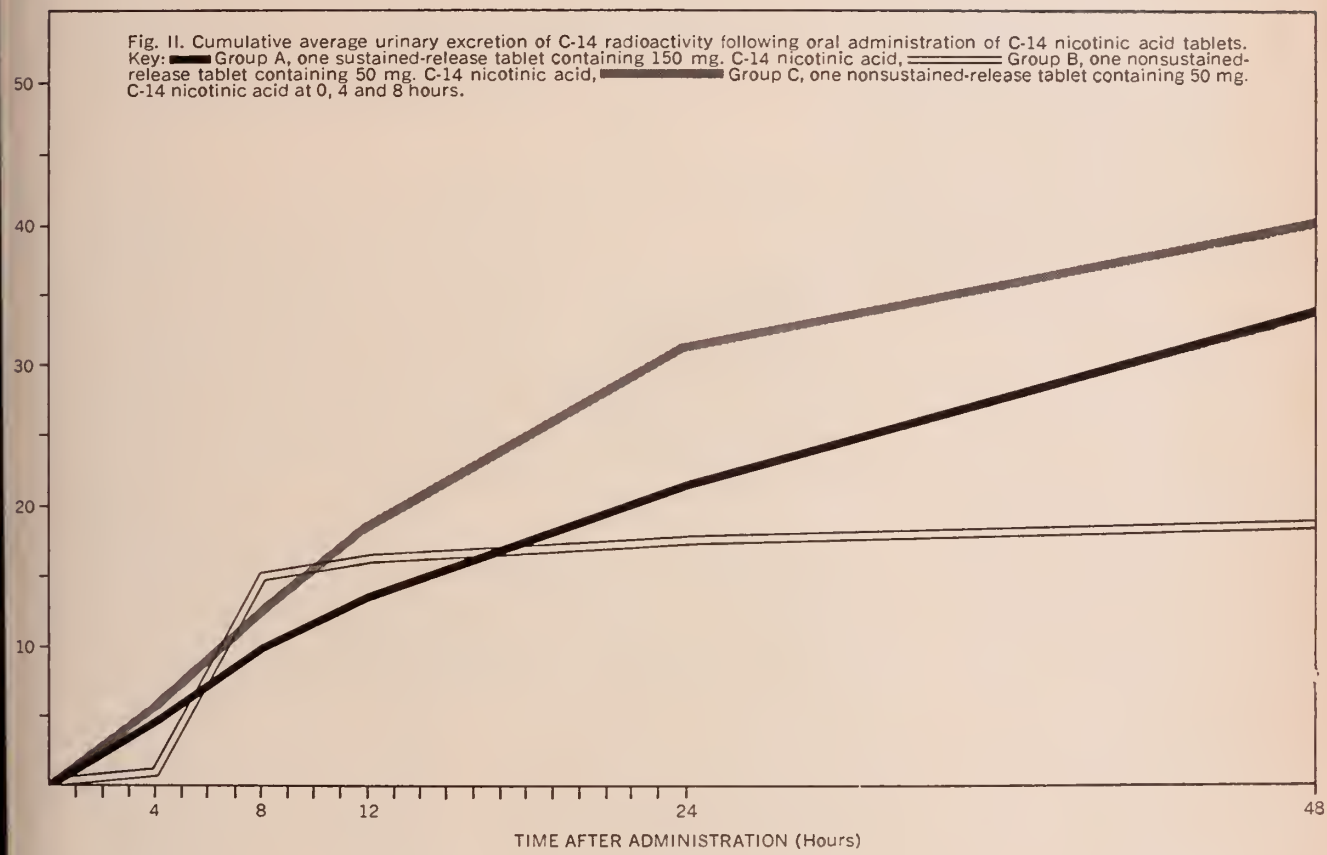
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References: 1. Report by Nuclear Science & Engineering Corp., Pittsburgh, Pa., in files of Philips Roxane Laboratories. 2. Connolly, R.: W. Virginia Med. J. *56*:263 (Aug.) 1960. 3. Curran, T. R., and Phelps, D. K.: Am. Pract. & Digest Treat. *11*:617 (July) 1960.

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ANORECTIC
PROGRAM

DESOXYN® Gradumet®
METHAMPHETAMINE HYDROCHLORIDE IN LONG-RELEASE DOSE FORM

5 mg. 10 mg. 15 mg.

DESBUTAL® 10 Gradumet
10 mg. METHAMPHETAMINE HYDROCHLORIDE, 60 mg. SODIUM PENTOBARBITAL

FRONT SIDE

DESBUTAL 15 Gradumet
15 mg. METHAMPHETAMINE HYDROCHLORIDE, 90 mg. SODIUM PENTOBARBITAL

FRONT SIDE

MOOD ELEVATION

DESOXYN Gradumet

Smooth appetite control plus mood elevation

Typically, the obese patient is a repeat dieter. And with each failure, the task looks more hopeless. Therefore, it is often just as important to lift the mood as to curb the appetite. Desoxyn Gradumet does just that. It gently elevates and sustains the mood. And no other product—amphetamine or non-amphetamine—is more effective in suppressing appetite.

DESBUTAL Gradumet

For patients who can't take plain amphetamine

Desbutal Gradumet contains 2 drugs, each in its own tablet section, combined back to back to form a single tablet. One section contains Desoxyn to suppress the appetite and lift the mood; the other contains Nembutal® (pentobarbital) to soothe the patient and counteract any excessive stimulation. The drugs are released in an effective dosage ratio throughout the day.

CONTROLLED-RELEASE

HOW IT DIFFERS FROM LONG-RELEASE

The Gradumet is made up of thousands of interconnecting channels, much like a sponge. These channels—filled with a drug—end at the outer surface of the tablet. When fluid comes in contact with the Gradumet, the drug in the outer ends of the channels dissolves. As the fluid makes its way up the channels, there is a continuous release of medication.

Since the rate of release is rigidly determined by the size and number of channels, the Gradumet is able to provide controlled-release as well as long-release. Patients get a measured amount of medication, moment by moment, throughout the day—from a single oral dose.



THIS IS A RELEASE YOU CAN COUNT ON

THE PROGRAM

WEIGHT CONTROL BOOKLET



To help your obese patients understand why they are overweight—and what they can do about it—Abbott has a booklet called "The Secret of Controlling Your Weight." *It is available to your patients only through you.*

Here is a partial list of the topics covered:

- Why you are overweight
- Rewards of weight reducing
- Balanced meals
- Helpful hints
- Hunger between meals
- Snacks
- Weekly weighings
- Exercise
- Holidays, vacations, special events
- Leanness and longevity

Each topic is covered on one page in simple and easy-to-understand language. At the back of the booklet, there is a list of 160 foods showing their caloric content.

FOOD DIARY



The Food Diary is designed to help the overweight patient follow your eating instructions. Space is provided for breakfast, lunch, supper, and even snacks. By writing everything down that's eaten each day, the patient is constantly reminded that she's trying to change her eating habits. And you are furnished with a written record of how well she's doing.

This booklet also lists the caloric content of 160 foods.

See Brief Summary on next page.

THE PRICE

ABBOTT
ANORECTIC
PROGRAM

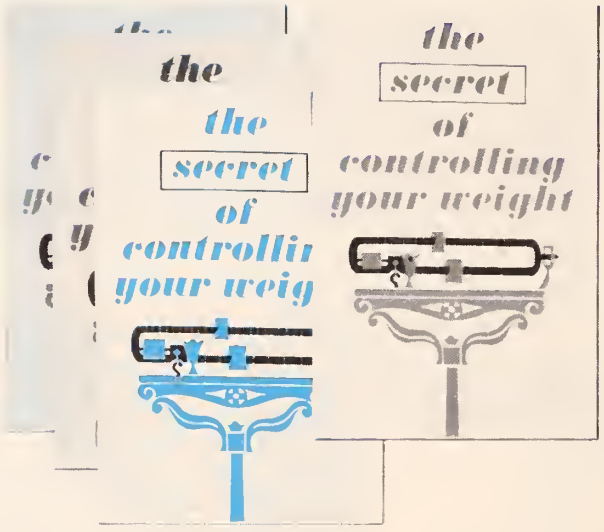
ECONOMY

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Desoxyn Gradumet and Desbutal Gradumet are so reasonably priced that patients in many cases save enough (compared to other leading long-release anoretics) to get five weeks of medication for the price of four.

FREE SUPPLIES





There are four weight control booklets, each with the same text, but with a different sample in the back of the booklet to meet your individual patient's needs. You have your choice of Desoxyn Gradumet in 10 mg. or 15 mg. strengths as well as Desbutal 10 Gradumet and Desbutal 15 Gradumet. The Food Diary is the same for all of the weight control booklets.

Your Abbott man will be happy to supply you with booklets. Just ask him.

CONTRAINDICATIONS: Methamphetamine (in Desoxyn and Desbutal) is contraindicated in patients taking a monoamine oxidase inhibitor. Do not use pentobarbital (in Desbutal) in persons hypersensitive to barbiturates.

PRECAUTIONS, SIDE EFFECTS: Observe caution in patients with hypertension, cardiovascular disease, hyperthyroidism, old age, or those sensitive to sympathomimetic drugs. Prolonged usage may lead to tolerance or psychic dependence. Careful supervision is necessary to avoid chronic intoxication and addiction.

Amphetamine side effects such as a headache, excitement, agitation, palpitation or cardiac arrhythmia usually may be controlled by reducing the dose. Paradoxically-induced depression is an indication to withdraw the drug. Pentobarbital (in Desbutal) may cause skin rash. Nervousness or excessive sedation with Desbutal is usually transient.

701069

ABBOTT

Gradumet—Long-release dose form, Abbott: U.S. Pat. No. 2,987,445.

WHY
A PREVAILING FEE PROGRAM and WHERE IS BLUE SHIELD GOING?

These are questions that many New Jersey doctors may have asked themselves . . . or discussed with their colleagues . . . in connection with Blue Shield's current Survey of Usual Charges.

In reply, we can't improve on the exposition of Matthew K. Gale, President of Pennsylvania Blue Shield, as delivered at that Plan's recent banquet celebrating the enrollment of its five-millionth member. Mr. Gale:

"I predict that the bold approach to paying doctors' charges of our Prevailing Fee Program will be the accepted method of the future and that fixed fee schedules will disappear. I believe that fees will not escalate as much as critics have predicted but will be affected only by changes in the cost of living."

Following an explanation of the present and predicted future impact of government programs upon the financing of health care, Mr. Gale stated: "There is no question in my mind that the leadership to provide alternatives to government influence rests squarely on the shoulders of the medical profession. Blue Shield is a powerful resource in implementing this leadership.

"How, then, can the medical profession incorporate Blue Shield in this leadership role?

"1. The medical profession can recognize the valuable resource it has in Blue Shield by not considering Blue Shield as an 'invidious third party.'

"2. By investing Blue Shield with and supplying the support for meaningful programs of fees and utilization control in order to demonstrate that responsible stewardship through local guidance can be maintained not only in the voluntary enrollments but also in the government-sponsored programs of Medicare and Title XIX.

"3. By actively encouraging Blue Shield to involve other providers of medical services within the Blue Shield program.

"4. By objectively resolving jurisdictional and philosophic disputes between hospitals and component groups of the medical profession instead of leaving these disputes to Blue Shield and Blue Cross to resolve.

"5. By establishing a strong hierarchical liaison in order that the American Medical Association and the National Association of Blue Shield Plans on a national level may operate in consonance with the same objectives and efforts pursued by component medical societies and local Blue Shield Plans.

"6. By minimizing the role of critic which, although of value, limits the critic to a sideline role and, instead, maximizing the role of dynamic leadership by working with and through Blue Shield in the design of programs and the implementation of meaningful and responsible controls."

And now—may we urgently request those physicians who have not yet completed and returned their Usual Charges questionnaires to do so at once? Thanks.

BLUE SHIELD®
MEDICAL-SURGICAL PLAN
OF NEW JERSEY
500 Broad Street, Newark

INFLAMMATION:
A cellular fight for life

A SYNTEX REPORT based on recently developed hypotheses about topical corticosteroids, including the cellular theories of inflammation by Thomas F. Dougherty, Ph.D., University of Utah.

You are looking at a fibroblast fighting for life. This cell—one of the most common found in connective tissue—has literally been poisoned by cytotoxins released from other cells that have ruptured. Soon, if the abnormal activity of this fibroblast does not cease, it, too, will rupture and die—one more casualty in the inflammatory wave of destruction precipitated by injury.

Until a short time ago no one had ever witnessed such a scene at the cellular level. Now, through advanced cinemicrographic techniques, it is possible to view and photograph the inflammatory process as produced experimentally in living animal tissue. This method permits new insight into the mechanism of inflammation and the role of corticosteroids in therapeutic management. Equally important, these techniques shed new light on factors that may make one corticosteroid more effective than another—factors that can be correlated with other chemical, biologic, and clinical parameters.

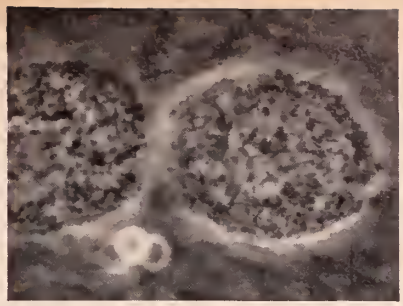


Visual evidence of how corticosteroids influence the inflammatory reaction

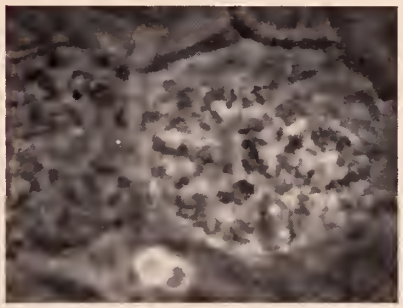
Working with phase-contrast cinemicrography on living animal tissue, Doctors Thomas F. Dougherty and David Berliner of the University of Utah College of Medicine have actually filmed cellular events that occur during the inflammatory reaction. This remarkable study* and additional work by these investigators, as well as by others, have established a new theoretical biologic basis for the antiinflammatory effect of the corticosteroids. (It must be noted that other theories, such as the lysosome or so-called "suicide bag" theory, have been postulated, although it is quite likely that there are more similarities than differences among the various theoretical models.)

The inflammatory wave of destruction

In this investigation an injurious injection of gelatin is used to set off an inflammatory reaction in living mouse tissue. What follows is a wave of destructive cellular activity that comprises the inflammatory response to injury. Mast cells (which contain heparin, serotonin and histamine) take up water, swell and rupture, releasing their contents, which are toxic outside the mast cell wall. These toxins, in turn, cause disintegration of other cells (such as fibroblasts) and the release of additional toxic material. Capillaries, too, take up water and leak unformed blood elements, causing edema. And polymorphonuclears, lymphocytes and perithelial cells invade the inflamed site. As a result of all these changes, the cellular environment reaches a state of turmoil.



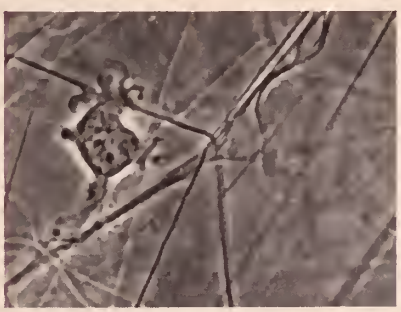
Phase-contrast microscopy showing mast cell before injury.



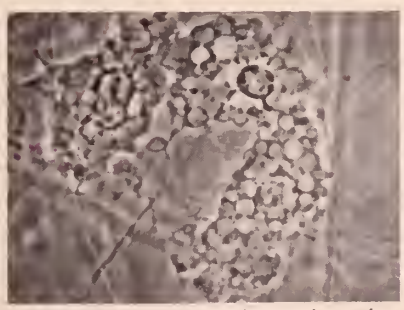
Mast cell (after injury) has broken up and released cytotoxins.

How corticosteroids change the picture

Corticosteroids appear to virtually stop the abnormal cellular activity that constitutes the inflammatory reaction. This permits the body's natural resources to clear up the inflamed area and repair the damaged tissue. This interpretation is supported by the fact that when the injurious gelatin solution is injected simultaneously with a corticosteroid —Synalar (fluocinolone acetonide)— the inflammatory pattern simply does not develop.



Fibroblast in high state of activity, much distorted.



Mast cells showing effects of corticosteroid action: cells are normal in size, shape and activity.



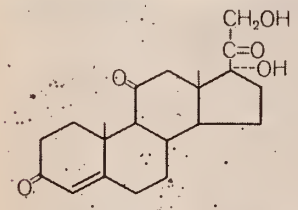
In summarizing his study Doctor Dougherty states: "...we also feel this work may explain why one corticosteroid helps a patient more rapidly and effectively than another. If it does, it is because one corticosteroid is the fastest, most effective inhibitor of the series of inflammatory events at the tissue level."

**A New View of Corticosteroid Action in Inflammatory Dermatoses*, a film based on this study, is now available from your Syntex representative.

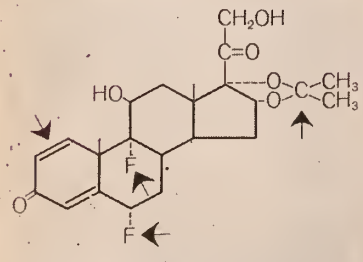
See last page for contraindications, precautions, side effects and dosage.

How advances in chemical design have achieved greater steroid potency

The chemical modification of corticosteroid molecules from the advent of hydrocortisone to the development of Synalar (fluocinolone acetonide) is a prime example of how biochemists can "design" to increase therapeutic activity and minimize undesirable side actions. Below, for example, we see the important changes that were made in reference to the hydrocortisone molecule to produce fluocinolone acetonide, one of the most active of all topical corticosteroids. As a result, a 0.01% preparation of Synalar (fluocinolone acetonide) has been reported to do the work of a 1% hydrocortisone product containing 100 times more cortiscosteroid. And it can often do it more effectively.



Hydrocortisone

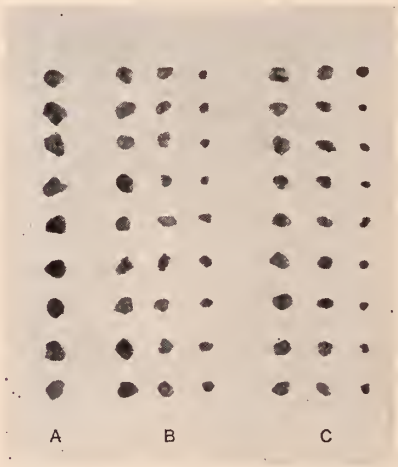


Fluocinolone Acetonide (Synalar)

- *a double bond between carbons 1 and 2*
- *fluorine substitutions at* both *the 6-α, and the 9-α positions*
- *the addition of the acetonide at the 16-α, 17-α positions, thus providing one of the most potent topical corticosteroids available.*

How bioassay tests are used to "predict" therapeutic potential

Biologic assays are another tool used by researchers to help establish the relative activity of corticosteroids. To date no single method of assaying corticosteroid activity has emerged as the ideal "yardstick" for predicting therapeutic potential. Taken together, however, these methods have proved useful. When such tests are run on various corticosteroids, a definite order of corticosteroid activity becomes evident. Compounds with the highest order of activity may be expected to merit clinical trial to establish their high therapeutic potential. When assayed by these methods, fluocinolone acetonide (Synalar) emerges as one of the most active topical corticosteroids, milligram for milligram, available for clinical application today.



THE THYMUS INVOLUTION ASSAY[1-4] is run on adrenalectomized rats. The sizes of the glands are measured, and the degree of involution caused by the steroid is determined as an indication of its potency. In the above photo, the comparative involution of thymus glands achieved with hydrocortisone and Synalar (fluocinolone acetonide) is shown. Untreated controls (A) show normal size. Group B – injected with 1, 2 and 4 mg. of hydrocortisone – show progressively smaller thymuses as does Group C – injected with fluocinolone acetonide – but with only 1/500th the dose of hydrocortisone.



THE ANTIGRANULOMA ASSAY[1-4] also utilizes adrenalectomized rats. Granulomas are induced by subcutaneous implantation of cotton pellets on either side of the thorax. The degree of granuloma inhibition achieved by a steroid reflects its potency. The above photo shows the inhibition of granuloma formation achieved with hydrocortisone and Synalar (fluocinolone acetonide). Untreated controls (A) show large, red granulomas adhering to the pellets. Group B, receiving hydrocortisone and Group C, receiving fluocinolone acetonide, show little, if any, granuloma formation. Fluocinolone acetonide produced the same effect as hydrocortisone with only 1/500th the dose. This assay, as well as the thymus involution assay, measures systemic rather than topical corticosteroid activity. Nevertheless, results by these methods correlate well with other assays and with the milligram potencies of topical steroids in current clinical use.

Worldwide clinical experience confirms the predictable therapeutic potential of Synalar

It is particularly gratifying that the promise of the advanced chemical design and high order of bioassay activity of Synalar (fluocinolone acetonide) has been confirmed by widespread therapeutic application. Indeed, the impressive clinical response rate of Synalar has been documented in no fewer than 232 papers from 22 countries.

Representative Clinical Results with Synalar*

Efficacy Documented in over 4,000 Patients

Condition	Number of Publications	Number of Patients	Significant Improvement†
Contact Dermatitis	27	750	713
Eczematous Dermatitis	21	472	409
Seborrheic Dermatitis	18	442	426
Atopic Dermatitis	24	460	426
Psoriasis	36	1,699	1,510
Neurodermatitis	18	351	324
Total	144	4,174	3,808

*Complete bibliography on request.

†Expressed by the authors as excellent, very good, good, complete remission of inflammation, etc.

PRESCRIBING INFORMATION

For initiation of therapy: Cream 0.025%, 5 and 15 Gm. tubes, 425 Gm. jars; *for emollient effect:* Ointment 0.025%, 15 Gm. tubes; *for maintenance therapy:* Cream 0.01%, 15 and 45 Gm. tubes, 120 Gm. jars; *for intertriginous or hairy sites:* Solution 0.01%, 20 cc. and 60 cc. plastic squeeze bottles; *for infected inflammatory dermatoses:* Neo-Synalar® Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes.

CONTRAINDICATIONS: Tuberculous, fungal, and most viral lesions of the skin, (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. PRECAUTIONS: Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. When severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. SIDE EFFECTS: Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. The neomycin in Neo-Synalar Cream rarely produces allergic reactions.

REFERENCES: 1. Lerner, L. J., Bianchi, A., Turkheimer, A. R., Singer, F. M., and Borman, A.: Anti-inflammatory steroids: potency, duration and modification of activities. Ann NY Acad Sci 116:1071 (Aug. 27) 1964. 2. Idem: Comparison of anti-granuloma, thymolytic and glucocorticoid activities of anti-inflammatory steroids. Proc Soc Exp Biol Med 116:385 (June) 1964. 3. Ringler, A.: Activities of adrenocorticosteroids in experimental animals and man, in Dorfman, R. I.: Methods of hormone research, New York, Academic Press, 1964. vol. III. pp. 234-280. 4. Gubersky, V. R.: To be published.

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For inflammatory dermatoses... by any measure a topical corticosteroid of choice

Synalar® (fluocinolone acetonide)

Milligram for milligram one of the most active topical corticosteroids available

Rapid and predictable in antiinflammatory and antipruritic activity

Results often comparable to those of systemic corticosteroids with fewer hazards



"George wants to know if it's okay to take his cold medicine now, Doctor, instead of seven o'clock?"



The long-continued action of Novahistine LP should help you both get a good night's sleep. Two tablets in the morning and two in the evening will usually provide round-the-clock relief by helping clear congested air passages for freer breathing. Novahistine LP also helps restore normal mucus secretion and ciliary activity—normal physiologic defenses against infection of the respiratory tract. Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result. Each Novahistine LP tablet contains: phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

NOVAHISTINE® LP

DOW **PITMAN-MOORE** Division of The Dow Chemical Company, Indianapolis

How long will it take her to recover from her hip fracture if she just doesn't care?



Does she really care? Is she alert, encouraged, positive and optimistic about getting completely well soon?

Or has she given in to the demoralizing impact of confinement, disability and dependency?

When functional fatigue complicates convalescence, Alertonic can help...

Pleasant-tasting Alertonic is pipradrol hydrochloride—an effective cerebral stimulant whose gentle analeptic action helps counteract the apathy and inertia that can often delay convalescence—together with an excellent vitamin and mineral formula, in a satisfying 15% alcohol vehicle.

Nothing fosters confidence and a sense of well-being better than your own personal warmth, understanding and encouragement together with Alertonic to help insure prompt response.

Adequate dosage is important: Prescribe Alertonic—one tablespoonful t.i.d., 30 minutes before meals...tastes best chilled.

And for your patient's sake, prescribe Alertonic in the convenient, economical one-pint bottle.

Alertonic®

Available Only On Prescription

Each 45 cc. (3 tablespoonfuls) contains: alcohol, 15%; pipradrol hydrochloride, 2 mg.; thiamine hydrochloride (vitamin B_1) (10 MDR*), 10 mg.; riboflavin (vitamin B_2) (4 MDR), 5 mg.; pyridoxine hydrochloride (vitamin B_6), 1 mg.; niacinamide (5 MDR), 50 mg.; choline,† 100 mg.; inositol,† 100 mg.; calcium glycerophosphate, 100 mg. (supplies 2% MDR for calcium and for phosphorus) and 1 mg. each of the following: cobalt (as chloride), manganese (as sulfate), magnesium (as acetate), zinc (as acetate), and molybdenum (as ammonium molybdate).

*Multiple of adult Minimum Daily Requirement supplied.
†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing life experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

Merrell

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SCIENTIFIC SHOE FITTING

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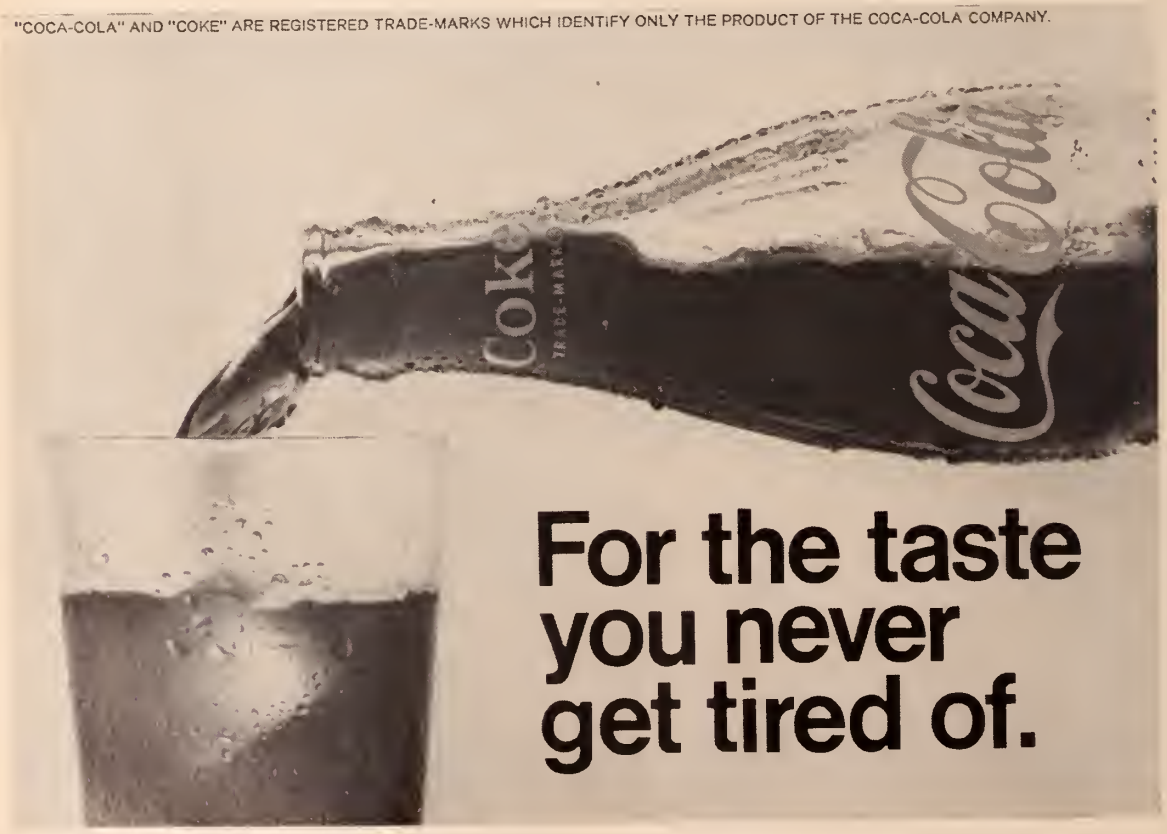
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For the taste you never get tired of.

NEW ZEST FOR LIVING FOR YOU AND/OR YOUR PATIENTS!

Let genuine Battle Creek fitness-and-figure aids bring you and your patients a new zest for living in just minutes per day. A trim, firm figure . . . new fun! They're all effective in action—superbly built, and each designed and engineered by experts. Call or recommend Kessler Associates when you're looking for just the right equipment to help in a patient's recovery program. Each aid is easy to use—convenient to use—any time, day or night in your home, your patient's home or office. Come in and see Kessler's large display of Battle Creek equipment and other therapeutic aids such as Hanovia Sun-Lamps, Hydrocollator Moist Heat Equipment and many others. Try them out and see how easy it is to be good to yourself and your patients.



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Patients are returned to the referring physician after appropriate studies have been made, together with a complete detailed report of the findings of the Institute and its consultants and recommendations for therapy. Literature on request.

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Phone: TR 6-9300

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for

- EMPHYSEMA
- ASTHMA
- CHRONIC BRONCHITIS
- BRONCHIECTASIS

The fast-disintegrating uncoated tablet gives relief in 15 minutes

Each tablet contains:

Potassium Iodide	195 mg.
Aminophylline	130 mg.
Phenobarbital, Caution: May be habit forming	21 mg.
Ephedrine HCl	16 mg.

FEDERAL LAW PROHIBITS
DISPENSING WITHOUT PRESCRIPTION

Precautions: Usual for aminophylline-ephedrine-phenobarbital. Iodides may cause nausea, long use may cause goiter. Discontinue if symptoms of iodism develop.

Iodide contraindications: tuberculosis, pregnancy.

DOSAGE

One tablet, with full glass of water, 3 or 4 times daily.

Dispensed in bottles of 100 and 1000 tablets.

MUDRANE GG—Formula, dosage and package identical to Mudrane—*except*—100 mg. glyceryl guaiacolate replaces the potassium iodide. The value of Mudrane cannot be enjoyed by a small group in which K.I. is contraindicated. Mudrane GG is prepared for this group.

MUDRANE GG ELIXIR—Four 5 cc teaspoonfuls is equivalent to one Mudrane GG tablet. Dosage adjusted to age and weight of child. Mudrane GG Elixir is for pediatric patients and those who think they cannot swallow tablets. Dispensed in pint and half gallon bottles.

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217
Manufacturers of ethical pharmaceuticals since 1856

...but doctor, I eat like a bird!



IN WEIGHT CONTROL

OBETROL®

Each OBETROL-10 tablet contains: Methamphetamine Saccharate; 2.5 mg. Methamphetamine Hydrochloride; 2.5 mg. Amphetamine Sulfate; 2.5 mg. Dextro-amphetamine Sulfate; 2.5 mg. (OBETROL-20 tablets contain twice this potency) Pat. #2748052.

This combination of amphetamines may be useful as an adjunct in the management of certain forms of obesity where an appetite depressant is indicated.

CONTRAINDICATIONS: Hypertension, advanced arteriosclerosis, coronary artery disease, cardiac arrhythmias, peripheral vascular disease, states of undue restlessness, anxiety, excitement, agitated depression, hyperthyroidism, idiosyncrasy to amphetamine, concomitant administration of a monoamine oxidase inhibitor. PRECAUTIONS: Use with caution in individuals with anorexia, insomnia, vasomotor instability, asthenia, psychopathic personality, a history of homicidal or suicidal tendencies, and individuals who are known to be hyperreactive to sympathomimetic agents, or emotionally unstable individuals who are known to be susceptible to drug abuse. Certain monoamine oxidase inhibitors may potentiate the action of Obetrol. SIDE EFFECTS: The most common side effects attended with the use of amphetamines include nervousness, excitability, euphoria, insomnia, dryness of mouth, nausea, vertigo, constipation, and headache. DOSAGE AND ADMINISTRATION: Initial adult dose is one-half to one 'Obetrol-10' tablet daily, preferably one-half to one hour before meals. This may be gradually increased to one 'Obetrol-10' or 'Obetrol-20' tablet one to three times daily as indicated. SUPPLIED: Tablets scored, in bottles of 100, 500, and 1000.

REQUEST SAMPLES AND LITERATURE

OBETROL PHARMACEUTICALS • BROOKLYN, N.Y. 11207

Dr. _____

Address _____

City _____ State _____

OBETROL PHARMACEUTICALS
Div. of Rexar Pharmacal Corp.
Brooklyn, N.Y. 11207





Posed by professional model.

You can't set her free. But you can help her feel less anxious.

You know this woman.

She's anxious, tense, irritable. She's felt this way for months.

Beset by the seemingly insurmountable problems of raising a young family, and confined to the home most of the time, her symptoms reflect a sense of inadequacy and isolation. Your reassurance and guidance may have helped some, but not enough.

SERAX (oxazepam) cannot change her environment, of course. But it can help relieve anxiety, tension, agitation and irritability, thus strengthening her ability to cope with day-to-day problems. Eventually—as she regains confidence and composure—your counsel may be all the support she needs.

Indicated in anxiety, tension, agitation, irritability, and anxiety associated with depression.

May be used in a broad range of patients, generally with considerable dosage flexibility.

Contraindications: History of previous hypersensitivity to oxazepam. Oxazepam is not indicated in psychoses.

Precautions: Hypotensive reactions are rare, but use with caution where complications could ensue from a fall in blood pressure, especially in the elderly. One patient exhibiting drug dependency by taking a chronic overdose developed upon cessation questionable withdrawal symptoms. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose; excessive prolonged use in susceptible patients (alcoholics, ex-addicts, etc.) may result in dependence or habituation. Reduce dosage gradually after prolonged excessive dosage to avoid possible epileptiform seizures. Caution patients against driving or operating machinery until absence of drowsiness or dizziness is ascertained. Warn patients of possible reduction in alcohol tolerance. Safety for use in pregnancy has not been established.

Not indicated in children under 6 years; absolute dosage for 6 to 12 year-olds not established.

Side Effects: Therapy-interrupting side effects are rare. Transient mild drowsiness is common initially; if persistent, reduce dosage. Dizziness, vertigo and headache have also occurred infrequently; syncope, rarely. Mild paradoxical reactions (excitement, stimulation of affect) are reported in psychiatric patients. Minor diffuse rashes (morbilliform, urticarial and maculopapular) are rare. Nausea, lethargy, edema, slurred speech, tremor and altered libido are rare and generally controllable by dosage reduction. Although rare, leukopenia and hepatic dysfunction including jaundice have been reported during therapy. Periodic blood counts and liver function tests are advised. Ataxia, reported rarely, does not appear related to dose or age.

These side reactions, noted with related compounds, are not yet reported: paradoxical excitation with severe rage reactions, hallucinations, menstrual irregularities, change in EEG pattern, blood dyscrasias (including agranulocytosis), blurred vision, diplopia, incontinence, stupor, disorientation, fever, euphoria and dysmetria.

Availability: Capsules of 10, 15 and 30 mg. oxazepam.

To help you relieve anxiety and tension

Serax® (oxazepam)

Wyeth® SERVICE TO MEDICINE

Wyeth Laboratories
Philadelphia, Pa.


ECONOMICAL!
CORDRAN®
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EDITORIALS

Vincent Paul Butler 1893-1967

A few weeks ago, New Jersey Medicine lost one of its most distinguished figures. A formal obituary on Dr. Butler appears on page 194 of this JOURNAL. But more important than this catalogue of his activities, is the spirit of the man. To begin with, he began as a GP — a regular family doctor. This kind of service provides a background that no amount of specialized training can match.

But it is a willingness to be involved that gives the special cachet to men like Vincent Butler. He involved himself in medical-civic activities very early in his professional life. He was soon spotted by the leaders of the Hudson County Medical Society as a natural for all sorts of organizational chores. By 1942 he was secretary of that society and remained in that office for seven years. His colleagues then elected him president of the county medical society.

Hudson County could not, however, encompass all of Vince Butler's medical-civic interests. As early as 1938 he was councilor of the State Society's Second District and in 1947 he became chairman of the Judicial Council of The Medical Society of New Jersey. The following year he was named chairman of the Welfare Committee of the State Society. In 1952 he was elected Second Vice-President of our Society. In 1955 he was installed as President of The Medical Society of New Jersey. Later he became a member, and then Secretary, of our State Board of Medical Examiners — a position which he held at the time of his death.

Dr. Butler became a Papal Knight in 1954. He was a Trustee of the Hospital Plan. Dr. Butler served in World War I in the Army of the United States. And for fifteen years he had been the Chief Medical Examiner of his County.

This JOURNAL commented on our new President in 1955 — "Every inch a President." We then wrote, "he brings to his office a rich and varied background of civic and professional activities. He not only looks like a man of distinction, he is."

New Jersey Medicine cannot afford many more losses like this.

New Jersey's Parliament Of Medicine

Nearly every specialty society in the United States meets in our state every few years. The AMA, in fact, is coming to Atlantic City in June this year. If doctors can come from all fifty states — from Alaska, from Hawaii, from Maine, and from everywhere in between, who are we to say that they are wrong?

Well, as Confucious did not say, the grass always does seem greener on the other side of the street. But on May 13th next, and for only five days thereafter, the great parliament of New Jersey medicine will convene right here in Atlantic City. If you like the way your State Society is operating, come along and support the leaders of the Society. If you don't like the way they are operating, come on in and say so. This is your society.

Of course, most of you don't come to air grievances — though the floor is yours. You come to see exhibits, hear papers, pick up samples, find out what's new and interesting, and meet old friends. You can chew saltless salt water taffy, takes deep breaths of the famous saline air, pound the well-known boardwalk, ride like a maharajah in a wheelchair, get sauce on your shirt while eating a shore dinner, and otherwise participate in the activities that give Atlantic City its well merited soubriquet of "Playground of the World." Everybody else comes. Why not you?

Foreign Physicians Meeting Our Medical Manpower Needs

Physicians of the U.S.A. have extended the hand of welcome to foreign graduates. Of all new licenses granted back in 1950, only 5 per cent went to alumni of foreign medical schools. In 1959, the ratio was 20 per cent. Since then, about 17 per cent of all new medical licentiates in the United States have been foreign medical graduates. Thus, physician manpower has been materially augmented in recent years by the licensure of graduates of medical schools located in countries other than the United States and Canada. In the early 1930's, less than 200 foreign medical graduates were examined annually by state medical licensing boards. The number examined increased steadily in the late 1930's, reaching a prewar peak of 2,088 in 1940; that was followed by decreases during the war years to a low of 475 in 1945. Annual increases in the postwar years reached a peak in 1964 of 3,246 examinations taken by foreign medical graduates. These figures relate to the total number of examinations and include those taking examinations in more than one state.

The 1,488 foreign medical graduates licensed in 1965 represent a nearly five-fold increase over the number of foreign licentiates in 1950. In the same time span, the number of licentiates trained in the United States and Canada had increased by less than one-third.

In 1965 foreign medical graduates received first-time licenses to practice medicine in 40 states. Seven states issued licenses to only one foreign medical graduate, whereas one state licensed 312. In 19 states licensing 25 or more foreign medical graduates in 1965, the percentage of the total number of state licenses that were issued to foreign graduates ranged from 3 to 70 per cent. It is not clear what proportion of the foreign medical graduates are United States citizens, but it has been estimated that some 300 annually seek to enter internship programs in the United States on the basis of credentials obtained at foreign institutions. The 1,488 foreign medical graduates licensed in 1965 (17 per cent of total) represent an output equivalent to more than 15 additional United States schools of medicine. Thus, if we were to attempt to provide the entire number of new physicians now being licensed annually, it would require nearly a 20 per cent expansion in medical education facilities.

The Senseless Deaths

If the entire population of Hoboken, New Jersey—every man, woman, and child — had been wiped out in a year by a controllable plague, you would certainly hear a clarion call to *do something.* Well that's what happened in 1966 in automobile accident fatalities. And the number injured in such accidents equalled the entire population of our state!

The tragic headlines which announce the loss of American lives in Viet Nam make us constantly aware of the senselessness of war. The only consolation — if, indeed, there is any consolation — is that this fight in a steaming far-away land is being waged in the name of freedom and decency.

But there are other tragic headlines — too many, in fact. And we turn away from them without compassion. These are the headlines dealing with the loss of life on U.S. highways.

Yet when any newspaper or educational program discusses highway safety, we can sense a curtain of callousness being drawn down — an invisible barrier between the printed page and the thinking mind.

This fails to alter the fact that our highway casualty list is tragic. Perhaps even more tragic than our losses in Viet Nam. In Viet Nam the losses are suffered for a worthy cause.

On our highways, the atrocities are committed for the worst possible causes: such causes as "Get-there-before-the-other-guy" . . . and "Hurry-up-and-wait" . . . and "I'll-take-my-share-of-the-road-anyway."

Last year (according to a report by The Travelers Insurance Company) 48,500 men, women, and children were killed on the nation's roadways. That represents the entire population of Hoboken.

We print the fact here, and so do newspapers throughout the country. But who reads it? Who takes it to heart enough to want to do something about it?

New Jersey physicians have spearheaded a movement for automobile safety. There aren't many of them in this movement, and most of us feel smugly that it can't happen to us.

This editorial won't provide any solution. But you can help . . . everytime you get behind a wheel.

The Man Who Was Involved

In Atlantic City in February, a woman was attacked just off the Boardwalk. Several otherwise decent citizens gently tip-toed away during the assault. They didn't want to get involved. From time to time one reads of citizens who do this in their fear of involvement. On the other hand, every once in a while, some good citizen takes it on himself to call attention to injustice or evil. Often these good people are attorneys who take seriously their oaths as officers of the court. Physicians, however, rarely involve themselves in the nonmedical aspects of injustice. There is even difficulty in getting reports from doctors about beaten and battered children. The doctors don't want to be involved in criminal actions, nor in the possibilities of civil actons for defamation or libel that might be made if they report their suspicions.

Well, thirty years ago a young Passaic County physician did involve himself in correcting an injustice, and did so at no little personal risk. He was Dr. Francis Ash, who died last month at the age of 75. And the Passaic *Herald News,* commenting on his death, reported as follows:

When Dr. Francis W. Ash died in Glen Rock last week newspaper obituaries reported his accomplishments in the field of medicine, the fact that he was a former president of the Passaic County Medical Society, had been chief of staff and chief of surgery at St. Joseph's Hospital in Paterson, and a member of the staff of Ridgewood's Valley Hospital.

The obituaries did not mention, however, an incident in the life of Dr. Ash that stamped him as a citizen of the first order and for which the people of Passaic County are in his debt. It was Dr. Ash who blew the whistle on the jury-fixing ring which perverted justice in Passaic County courts in the early 1930s.

Dr. Ash was the defendant in a negligence suit brought by a Midvale man whose son had been treated by the physician. The plaintiff was asking $50,000 damages. The case went to trial in Paterson on May 15, 1933. That night two members of the jury who were sitting on the case called at Dr. Ash's home and offered him a proposition. If he would pay them $1,000 they would see to it that the verdict was "no cause for action" in his favor.

Dr. Ash listened and told them to come back. Then he contacted his lawyer who promptly informed the court. When the crooked jurors returned for the doctor's answer, detectives were waiting for them in an adjoining room.

Investigation uncovered a jury-fixing ring which was running a business in Passaic County. James D. Carpenter, Jr., a Montclair lawyer still practicing, came into Passaic County as an assistant attorney general to clean up the mess. He jailed two lawyers and three men employed by them to contact jurors and offer bribes to fix cases.

The Carpenter investigation spread beyond jury-fixing to the gambling rackets and official corruption. The exposures provided the biggest scandal in Passaic County's history. The effects were felt all the way to Trenton.

This almost forgotten chapter of Passaic County history is a reminder that if it weren't for decent citizens like Dr. Ash it would be impossible to keep our jury system free from corrupting influences.

We doctors agree that we are, indeed, our brother's keepers in terms of health and medical practice. But we sometimes forget that we are citizens first.

201st ANNUAL MEETING

The Medical Society of New Jersey

Saturday through Wednesday
May 13 to 17, 1967

Chalfonte-Haddon Hall
Atlantic City

Registration

Saturday and Sunday, May 13 and 14, from 10:00 a.m. to 4:30 p.m. Monday and Tuesday, May 15 and 16, from 9:00 a.m. to 4:30 p.m. Wednesday, May 17, from 9:00 a.m. to 12:00 noon.

Golden Merit Award

Saturday, May 13 at 2:00 p.m. Honored will be those members of MSNJ who have held the degree of Doctor of Medicine for fifty years.

House of Delegates

First session—Saturday, May 13, at 4:00 p.m.

Second session (election)—Sunday, May 14, at 2:00 p.m.

Third session—Tuesday, May 16, at 9:30 a.m.

Reference Committees

Sunday, May 14, at 11:00 a.m.

General Session on Medicare

Sunday, May 14 at 3:00 p.m. Present Status And Recent Developments Under Medicare—presented in cooperation with the Prudential Insurance Company of America, official intermediary for Medicare, and the Social Security Administration.

Medical-Surgical Plan

Saturday, May 13—At the close of the first session of the House of Delegates there will be an open discussion on the Medical-Surgical Plan.

Scientific Program

Scientific section sessions:

Monday, May 15, from 9:30 to 11:45 a.m., and from 2:00 to 4:15 p.m.

Wednesday, May 17, from 9:30 to 11:45 a.m.

Special co-sponsored scientific sessions:

Tuesday, May 16, from 9:00 to 11:45 a.m. and from 2:00 to 4:45 p.m.

Motion Picture Theatre

Monday and Tuesday, May 15 and 16, morning and afternoon; and Wednesday, May 17, morning.

Exhibits

Informational—Monday, May 15 and Tuesday, May 16, from 9:00 a.m. to 5:00 p.m., and Wednesday, May 17, from 9:00 a.m. to 12:00 noon.

Scientific—Monday, May 15 and Tuesday, May 16, from 9:00 a.m. to 5:00 p.m., and Wednesday, May 17, from 9:00 to 12:00 noon.

Technical—Monday, May 15 and Tuesday, May 16, from 9:00 a.m. to 5:00 p.m., and Wednesday, May 17, from 9:00 to 12:00 noon.

Reception for President-Elect

Sunday, May 14, at 5:30 p.m. Members, guests, wives of members and guests, and Auxiliary members are invited to attend a reception honoring the President-elect, Dr. Louis K. Collins. (Admission by badge)

Annual Dinner-Dance

Monday, May 15 at 7:00 p.m. Members, guests, wives of members and guests, and Auxiliary members are invited to attend a dinner-dance in honor of President and Mrs. Joseph R. Jehl. (Tickets at the Registration desk—$10.00 per person)

Exhibitors Reception-Buffet

Tuesday, May 16 at 6:00 p.m. Reception and buffet honoring annual meeting exhibitors. (By invitation only)

Receptions, Officers' Dinner, Luncheons

Saturday, May 13 at 5:30 p.m. Reception—University of Virginia Alumni Fund, Medical Division ("Dutch Treat")

Saturday, May 13 at 5:30 p.m. Reception—Essex County Medical Society (By invitation only)

Saturday, May 13 at 7:00 p.m. Officers' Dinner (By invitation only)

Monday, May 15 at 12:30 p.m. Luncheon—New Jersey Chapter, American College of Chest Physicians.

Monday, May 15 at 12:30 p.m. Luncheon—New Jersey Rheumatism Association.

Monday, May 15 at 1:00 p.m. Luncheon—New Jersey Orthopaedic Society.

Monday, May 15 at 1:00 a.m. Luncheon—Committee on Maternal and Infant Welfare and Field Physicians.

1967 Annual Meeting

DAILY SCHEDULE

Saturday through Wednesday
May 13 to 17, 1967

Chalfonte-Haddon Hall
Atlantic City

Friday / May 12, 1967

5:00 p.m.—Board of Trustees

Saturday / May 13, 1967

10:00 a.m.—Registration Opens
2:00 p.m.—Golden Merit Award Ceremony
followed by
Reception for Award Recipients and Their Families
4:00 p.m.—House of Delegates
followed by
Open Discussion on Medical-Surgical Plan
5:30 p.m.—Reception—University of Virginia Alumni Fund, Medical Division ("Dutch-Treat")
5:30 p.m.—Reception—Essex County Medical Society
(by invitation only)
7:00 p.m.—Officers' Dinner
(by invitation only)
9:00 p.m.—Nominating Committee

Sunday / May 14, 1967

11:00 a.m.—Reference Committees
2:00 p.m.—House of Delegates
(election)
followed by
General Session on Medicare
5:30 p.m.—Reception Honoring President-Elect Collins
All members, official guests, and their wives, and Auxiliary members are cordially invited to attend (admission by badge)

Monday / May 15, 1967

9:00 a.m.—Exhibits Open
9:00 a.m.—Spring Meeting, New Jersey Orthopaedic Society
9:30 a.m.—Scientific Sessions:
Allergy, Gastroenterology and Proctology, Pediatrics
Clinical Pathology, Medicine, Rheumatism
Obstetrics and Gynecology, Urology
10:00 a.m.—Motion Picture Theatre
12:30 p.m.—Luncheon—New Jersey Chapter, American College of Chest Physicians
12:30 p.m.—Luncheon—New Jersey Rheumatism Association
1:00 p.m.—Luncheon—Committee on Maternal and Infant Welfare and Field Physicians
1:00 p.m.—Luncheon—New Jersey Orthopaedic Society
2:00 p.m.—Scientific Sessions:
Anesthesiology, Orthopedic Surgery, Surgery
Cardiovascular Diseases, Chest Diseases, General Practice
Ophthalmology, Otolaryngology, Psychiatry and Neurology
2:00 p.m.—Motion Picture Theatre
7:00 p.m.—Annual Dinner-Dance
All members, official guests, and their wives, and Auxiliary members are cordially invited to attend ($10.00 per person)

Tuesday / May 16, 1967

9:00 a.m.—Special Scientific Session on Accidental Poisoning
9:30 a.m.—House of Delegates
9:30 a.m.—Special Scientific Session on Differential Diagnosis of Schizophrenic Reactions
10:00 a.m.—Motion Picture Theatre
1:00 p.m.—House of Delegates' Luncheon
1:30 p.m.—House of Delegates Reconvenes
2:00 p.m.—Special Scientific Session on Diabetes Detection
2:00 p.m.—Special Session on Computers in Medicine
2:00 p.m.—Motion Picture Theatre
6:00 p.m.—Reception-Buffet for Technical Exhibitors
(by invitation only)

Wednesday / May 17, 1967

9:00 a.m.—Board of Trustees
9:30 a.m.—Scientific Sessions:
Dermatology
Metabolism
10:00 a.m.—Motion Picture Theatre
12:00 noon—Exhibits and Registration Close

1967 Annual Meeting

REFERENCE COMMITTEES

Sunday, 11:00 a.m. May 14, 1967

Reference Committee on Constitution and Bylaws

Reports of the:
- Committee on Revision of Constitution and Bylaws
- Amendments to Constitution
- Amendments to Bylaws

Reference Committee "A"

Reports of the:
- President
- Board of Trustees
- Secretary
- Judicial Council
- Executive Director
- Committee on Credentials

Reference Committee "B"

Reports of the:
- Treasurer
- Committee on Finance and Budget
- Committee on Publication
- Committee on Medical Student Loan Fund

Reference Committee "C"

Report of the:
- Medical-Surgical Plan of New Jersey

Reference Committee "D"

Reports of the:
- Committee on Medical Defense and Insurance
- Committee on Medical Education
- Committee on Medicine and Religion
- Committee on Retirement Plan for Physicians

Reference Committee "E"

Reports of the:
- Council on Legislation
- Council on Public Relations

Reference Committee "F"

Reports of the:
- Council on Medical Services, and its Special Committees on:
  - Chronically Ill and the Aging
  - Occupational Health, Rehabilitation, and Workmen's Compensation

Reference Committee "G"

Reports of the:
- Council on Public Health, and its Special Committees on:
  - Air Pollution Control
  - Cancer Control
  - Child Health
  - Conservation of Vision
  - Maternal and Infant Welfare
- Committee (ad hoc) on Mental Health

Reference Committee "H"

Reports of the:
- Committee on Annual Meeting, and its Subcommittees on:
  - Scientific Exhibits
  - Scientific Program
- Committee on Honorary Membership
- Committee on Disaster Medical Care
- Committee on Nursing Education and Recruitment
- Committee on Traffic Safety
- Advisory Committee to the Woman's Auxiliary

Nominations for Emeritus Membership

The Committee on Credentials will meet at the Registration Desk each morning of the meeting.

1967 Annual Meeting

HOUSE OF DELEGATES

Saturday, 4:00 p.m. — May 13, 1967
Sunday, 2:00 p.m. — May 14, 1967
Tuesday, 9:30 a.m. — May 16, 1967

President—Joseph R. Jehl, M.D., Clifton
Secretary—Marcus H. Greifinger, M.D., Newark
Speaker—Jesse McCall, M.D., Newton
Parliamentarian—Robert M. Backes, Trenton

Sessions

Saturday, May 13, 1967, 4:00 p.m.

First Session

Invocation

The Reverend William B. Van Valkenburgh, Rector, St. Peter's Episcopal Church, Clifton

Call to Order

Organization of the House

Transactions of the 1966 House of Delegates

Introduction of Guests and Delegates from Other States

Annual and Supplemental Reports

Proposed Amendments to the Constitution and Bylaws

Resolutions

New Business

Announcements

Sunday, May 14, 1967, 2:00 p.m.

Second Session

Report of Nominating Committee

Election

Tuesday, May 16, 1967, 9:30 a.m.

Third Session

Reports of Reference Committees

Unfinished Business

Address of the President

Installation of the Incoming President

Inaugural Address

Adjournment

(Luncheon Recess—1:00-1:30 p.m.)

OFFICES TO BE FILLED BY ELECTION — 1967 ANNUAL MEETING

Office	Term	From To	Incumbent and County
President-Elect	1 year	May 1967-May 1968	Louis K. Collins Gloucester
1st Vice-President	1 year	May 1967-May 1968	John F. Kustrup Mercer
2nd Vice-President	1 year	May 1967-May 1968	Nicholas A. Bertha Morris
Secretary	1 year	May 1967-May 1968	Marcus H. Greifinger Essex
Treasurer	1 year	May 1967-May 1968	Samuel J. Lloyd[1] Mercer
Trustees			
1st District	3 years	May 1967-May 1970	Emanuel M. Satulsky Union
3rd District	2 years	May 1967-May 1969	David Eckstein[2] Mercer
4th District	3 years	May 1967-May 1970	Louis F. Albright Monmouth
5th District	3 years	May 1967-May 1970	A. Guy Campo Gloucester

[1]Appointed by Board of Trustees to fill unexpired term of Daniel F. Featherston (deceased), to serve until the 1967 annual meeting.
[2]Appointed by Board of Trustees to fill unexpired term of Samuel J. Lloyd (resigned), to serve until the 1967 annual meeting.

Office	Term	From	To	Incumbent and County
Judicial Councilor				
3rd District	3 years	May 1967	May 1970	Albert F. Moriconi Mercer
AMA Delegates	2 years	Jan. 1968	Dec. 1969	Joseph P. Donnelly Hudson
	2 years	Jan. 1968	Dec. 1969	Jesse McCall Sussex
	2 years	Jan. 1968	Dec. 1969	Isaac N. Patterson Gloucester
AMA Alternate Delegates	2 years	Jan. 1968	Dec. 1969	Joseph R. Jehl Passaic
	2 years	Jan. 1968	Dec. 1969	Robert E. Verdon Bergen
	2 years	Jan. 1968	Dec. 1969	Louis S. Wegryn Union
Delegates and Alternate Delegates to Other States				
New York				
Delegate	1 year	1968 Annual Meeting		Joseph P. Donnelly Hudson
Alternate	1 year	1968 Annual Meeting		David B. Scanlan Atlantic
Connecticut				
Delegate	1 year	1968 Annual Meeting		Lloyd A. Hamilton Hunterdon
Alternate	1 year	1968 Annual Meeting		Frank W. Konzelmann Atlantic
Administrative Councils				
Legislation				
2nd District	3 years	May 1967	May 1970	Nathan J. Plavin Hudson
3rd District	3 years	May 1967	May 1970	Leonard Rosenfeld Hunterdon
Medical Services				
2nd District	3 years	May 1967	May 1970	Leonard Brown Bergen
3rd District	3 years	May 1967	May 1970	Karl T. Franzoni Mercer
Public Health				
2nd District	3 years	May 1967	May 1970	Marion F. Kaletkowski Passaic
3rd District	3 years	May 1967	May 1970	Elmer J. Elias Mercer
5th District	2 years	May 1967	May 1969	Vacancy[3]
Public Relations				
3rd District	3 years	May 1967	May 1970	George E. Barbour Somerset
4th District	1 year	May 1967	May 1968	Vacancy[4]
6th Member	3 years	May 1967	May 1970	Norman K. Boudwin Burlington
Standing Committees				
Annual Meeting	3 years	May 1967	May 1970	Peter H. Marvel Atlantic
Finance and Budget	1 year	May 1967	May 1968	Vacancy[5]
	3 years	May 1967	May 1970	John S. Van Mater[6] Middlesex
Medical Defense and Insurance	3 years	May 1967	May 1970	Jerome G. Kaufman[7] Essex
Medical Education	3 years	May 1967	May 1970	John W. Nicholson, III Burlington
Publication	3 years	May 1967	May 1970	C. Spencer Davison Salem
Woman's Auxiliary Advisory	3 years	May 1967	May 1970	Edward M. Coe Union

[3]Vacancy created by resignation of Carl J. Records, Cape May.
[4]Vacancy created by resignation of Howard C. Pieper, Monmouth.
[5]Vacancy created by resignation of George J. Kohut, Middlesex.
[6]Must be a member of the 1967 House of Delegates.
[7]Appointed by Board of Trustees to fill unexpired term of Daniel F. Featherston (deceased), to serve until the 1967 annual meeting.

1967 Annual Meeting

SESSION ON MEDICARE

Sunday, May 14 — 3:00 p.m.

Symposium On Present Status And Recent Developments Under Medicare

Presiding

Joseph R. Jehl, M.D., President

Medicare In The Sixties

Thomas G. Bell, Ph.D., Assistant Bureau Director, Bureau of Health Insurance, Social Security Administration, Baltimore, Maryland

Moderator

William C. White, Jr., Director, Health Insurance Relations, External Affairs Department, The Prudential Insurance Company of America, Newark

Panelists

Everett J. Park, General Manager, Millville Office, Prudential Insurance Company

Thomas J. Beatty, Manager, Medicare Part B, Millville Office, Prudential Insurance Company

George T. Garver, Jr., Senior Medicare Consultant, Newark Office, Prudential Insurance Company

Bertram M. Bernstein, M.D., Medical Director, Division of Public Welfare, New Jersey State Department of Institutions and Agencies, Trenton

1967 Annual Meeting

DINNER-DANCE

Monday, May 15 — 7:00 p.m.

Honoring

President and Mrs. Joseph R. Jehl

Toastmaster

Richard I. Nevin

Welcome

Mrs. Jesse T. Glazier, President, Woman's Auxiliary

Introductions

Mrs. David E. Zuckerman, President-Elect, Woman's Auxiliary
Louis K. Collins, M.D., President-Elect

Presentations

Fellow's Key:
To: Joseph R. Jehl, M.D., President
By: John J. Bedrick, M.D., Immediate Past-President

Fellowette's Pin:
To: Mrs. Jesse T. Glazier, President, Woman's Auxiliary
By: Joseph R. Jehl, M.D., President

Entertainment

Heidi Krall, Metropolitan Opera Soprano

Music

Martin King Orchestra Associates

1967 Annual Meeting

SPEAKERS

Saturday through Wednesday
May 13 to 17, 1967

Chalfonte-Haddon Hall
Atlantic City

Angrist, Alfred A., M.D., New York
Atkinson, R. H., New York

Baltzell, William H., M.D., Philadelphia
Bayless, Theodore, M.D., Baltimore
Beatty, Thomas J., Millville
Bell, Thomas G., Ph.D., Baltimore
Berger, Robert A., M.D., New York
Bernstein, Bertram M., M.D., Trenton
Breen, James L., M.D., Newark

Calabro, John J., M.D., Jersey City
Cinotti, Alphonse A., M.D., Jersey City
Cole, Malvin, M.D., Jersey City
Cutler, Milton, M.D., Atlantic City

Davis, Joseph H., M.D., Miami
Devlin, Arthur A., M.D., Newark
DiBianco, John, M.D., Jersey City
Dolger, Henry, M.D., New York

El-Meligi, A. Moneim, Ph.D., Princeton

Fernicola, Anthony R., M.D., Newark

Garver, George T., Jr., Newark
Gelb, Jerome, M.D., Irvington
Gerarde, Horace W., M.D., Rutherford
Goldberg, Harry C., M.D., Plainfield
Goldstein, Leonide, D.Sc., Princeton
Golz, Harold H., M.D., Wayne

Haase, F. Robert, M.D., Neptune City
Harley, Robison D., M.D., Atlantic City
Haun, Paul, M.D., Trenton
Horowitz, Robert, M.D., Jersey City

Kallen, Arnold, M.D., Newark
Krall, Leo P., M.D., Boston
Krosnick, Arthur, M.D., Trenton

Lansbury, John, M.D., Philadelphia
Laurenzi, Gustave A., M.D., Montclair
Leaman, John C., M.D., Jersey City
Lewin, Michael L., M.D., New York

Marler, Eric, M.D., New York
McDonald, Glen W., M.D., Washington
Middleton, Elliott, Jr., M.D., Upper Montclair
Miller, O. J., M.D., New York
Morrison, Ashton B., M.D., Plainfield

Nadas, Alexander S., M.D., Boston

Orton, Hal, New York
O'Sullivan, John, M.D., Brighton, Mass.

Park, Everett J., Millville
Parsonnet, Victor, M.D., Millburn
Pfeiffer, Carl C., M.D., Princeton

Ringelheim, Daniel, Ph.D., New York
Rush, Martin R., M.D., Long Branch
Ryan, Walter M., Jr., M.D., Neptune City

Silberstein, Richard M., M.D., Staten Island
Small, Harold S., M.D., Morristown
Stern, Richard U., M.D., Newark
Sugarman, A. Arthur, M.D., Princeton
Sweeney, William J., III, M.D., New York
Sylvester, Loring E., M.D., Salem

Verhulst, Henry L., Arlington, Virginia

White, William C., Jr., Newark
Wichman, Adolph R., M.D., Denville
Wilkerson, Hugh L. C., M.D., Concord, N. H.
Whitehead, Edwin, Chauncey, New York

1967 Annual Meeting

SCIENTIFIC PROGRAM

Monday, May 15, 1967
Wednesday, May 17, 1967
Regular Joint Sessions

Tuesday, May 16, 1967
Special
Co-sponsored Sessions

Scientific Section Officers

Allergy
CHAIRMAN—Roslyn Barbash, M.D., Teaneck
SECRETARY—William Greenberg, M.D., Perth Amboy

Anesthesiology
CHAIRMAN—Francis G. Casey, Jr., M.D., North Plainfield
SECRETARY—Dexter B. Blake, M.D., Morristown

Cardiovascular Diseases
CHAIRMAN—Gilbert E. Levinson, M.D., Jersey City
SECRETARY—Theodore H. Goldberg, M.D., Westwood

Chest Diseases
CHAIRMAN—Alfred Yager, M.D., West New York
SECRETARY—David Wiener, M.D., Irvington

Clinical Pathology
CHAIRMAN—Jacques B. Wallach, M.D., Westfield
SECRETARY—Simon Soumerai, M.D., Camden

Dermatology
CHAIRMAN—Hugh McCulloch, Jr., M.D., Plainfield
SECRETARY—Harry C. Goldberg, M.D., Plainfield

Gastroenterology and Proctology
CHAIRMAN—Robert Horowitz, M.D., Jersey City
SECRETARY—Salvatore J. Detrano, M.D., Union City

General Practice
CHAIRMAN—Victor H. Boogdanian, M.D., New Brunswick
SECRETARY—Carl A. Restivo, M.D., Jersey City

Medicine
CHAIRMAN—Milton Cutler, M.D., Atlantic City
SECRETARY—Jacob L. Drossner, M.D., Pennsauken

Metabolism
CHAIRMAN—Henry A. Terwedow, M.D., North Bergen
SECRETARY—Harvey P. Einhorn, M.D., South Orange

Obstetrics and Gynecology
CHAIRMAN—James L. Breen, M.D., Newark
SECRETARY—Paul Andreson, M.D., Elizabeth

Ophthalmology
CHAIRMAN—Oram R. Kline, Jr., M.D., Camden
SECRETARY—Humbert M. Gambacorta, M.D., Newark

Orthopedic Surgery
CHAIRMAN—Robert G. Greene, M.D., Montclair
SECRETARY—John J. Reilly, Jr., M.D., Elizabeth

Otolaryngology
CHAIRMAN—August P. Ciell, M.D., Haddonfield
SECRETARY—James E. Brennan, M.D., Camden

Pediatrics
CHAIRMAN—Suzanne A. Widrow, M.D., Hanover
SECRETARY—Louis L. Krafchik, M.D., New Brunswick

Psychiatry and Neurology
CHAIRMAN—Bernard R. Goldberg, M.D., East Orange
SECRETARY—Joseph C. Borrus, M.D., New Brunswick

Radiology
CHAIRMAN—John R. Helff, M.D., New Brunswick
SECRETARY—Richard Kirchner, M.D., New Brunswick

Rheumatism
CHAIRMAN—Peter W. Vanace, M.D., Haddonfield
SECRETARY—William D. Kimler, M.D., Collingswood

Surgery
CHAIRMAN—Adolph R. Wichman, M.D., Denville
SECRETARY—Stephen H. M. Plum, M.D., Morristown

Urology
CHAIRMAN—Anthony R. Fernicola, M.D., Newark
SECRETARY—Harold B. Schwartz, M.D., Union City

Scientific Sessions

Monday Morning, May 15

Joint Session

Sections on:

Allergy
Gastroenterology and Proctology
Pediatrics

Presiding

Roslyn Barbash, M.D., Chairman
Section on Allergy

9:30 a.m. / Election of Section Officers for 1967-1968

9:45 a.m. / Cine and Still Photography of Intragastric Lesions and Jejunal Biopsy

JOHN DiBIANCO, M.D., Assistant Professor of Medicine, New Jersey College of Medicine, Jersey City

Discussor: ROBERT HOROWITZ, M.D., Jersey City

Two movies are here presented: One concerns the passage of the fibergastroscope in a patient with marked kyphoscoliosis, having a gastric ulcer. The healing stages of this ulcer are demonstrated as viewed through the fibergastroscope. Several unusual varieties of gastric ulcerations are also going to be presented.

The second film shows the Rubin tube multipurpose gastrointestinal biopsy. The instrumentation on obtaining a small bowel biopsy, and the histology of a normal jejunal biopsy are demonstrated.

10:10 a.m. / Pediatric Cytogenetics

O. J. MILLER, M.D., Associate Professor of Obstetrics and Gynecology, Columbia Presbyterian Medical Center, New York

Summary not received

10:35 a.m. / Clinical Manifestations of Enzyme Deficiencies of the Small Intestines (Milk Intolerance; Celiac Disease)

THEODORE BAYLESS, M.D., Assistant Professor of Medicine, Johns Hopkins University School of Medicine, Baltimore

Discussor: ELLIOTT MIDDLETON, Jr., M.D., Upper Montclair

Milk causes abdominal cramps and diarrhea in patients who have deficient jejunal levels of the sugar splitting enzyme, lactase. The symptoms can be reproduced by an oral load of lactose. This enzyme deficiency occurs in many, otherwise healthy adults who were able to drink milk as infants. There is evidence that lactase deficiency and resultant milk intolerance are genetic traits.

It has been postulated that the underlying defect in celiac disease also may be an intestinal enzyme deficiency. Gluten (a protein fraction of wheat) is damaging to the jejunal mucosa. If it is withheld, the patient and the gut improve rapidly. If gluten is refed, there is rapid deterioration in mucosal histology and function. It is possible that normally an enzyme digests gluten and renders it harmless but in celiac disease, this enzyme is lacking and undigested gluten is able to damage the intestine.

11:00 a.m. / Question and Answer Period

11:45 a.m. / Visit to Exhibits

Joint Session

Sections on:

Clinical Pathology
Medicine
Rheumatism

Presiding

Milton Cutler, M.D., Chairman
Section on Medicine

9:30 a.m. / Election of Section Officers for 1967-1968

9:45 a.m. / Symposium on Rheumatic Diseases
Joint Manifestations

JOHN LANSBURY, M.D., Professor of Clinical Medicine, Temple University School of Medicine, Philadelphia

Summary not received

Systemic Manifestations

JOHN J. CALABRO, M.D., Associate Professor of Medicine, New Jersey College of Medicine, Jersey City

It is not unusual to find in patients with rheumatoid arthritis, evidence of disturbed function or structure of organs other than joints. Resulting symptoms may be so varied and widespread that this disease must be considered a generalized ailment of which arthritis is but a single manifestation.

Previous generations of physicians were not greatly impressed with the systemic character of rheumatoid arthritis. However, researchers of the last two decades have described numerous systemic features involving heart, lungs, kidney, spleen, liver, and other organs, as well as constitutional manifestations, including fever, malaise, anorexia, weight loss, anemia, and paraesthesias.

An account of the systemic character of rheumatoid patients will be presented.

Pathology of Rheumatic Diseases

ALFRED A. ANGRIST, M.D., Professor and Chairman, Department of Pathology, Albert Einstein College of Medicine, Yeshiva University, New York

Here offered are gross and microscopic tissue stud-

ies of the different forms of arthritis brought up to date for some lesions with recent E.M. studies. The fundamental relationship to valvular cardiac disease will be indicated. The possible relationship of the different forms of arthritis to allergy, stress and endocrine factors, and infection will be indicated. The role of the newer advances in the biochemistry of collagen and the ground substance and of lysosomes will be touched upon from the standpoint of the possible role in the tissues involved and pathogenesis.

Panel Discussion
Moderator: MILTON CUTLER, M.D., Atlantic City

11:45 a.m. / Visit to Exhibits

12:30 p.m. / Luncheon—New Jersey Rheumatism Association
Reservations: WILLIAM D. KIMLER, M.D., 127 Fourth Ave., Haddon Heights

Joint Session

Sections on:

Obstetrics and Gynecology
Urology

Presiding

Anthony R. Fernicola, M.D., Chairman
Section on Urology

9:30 a.m. / Election of Section Officers for 1967-1968

9:45 a.m. / Course and Anatomy of Pelvic Ureter
WILLIAM J. SWEENEY, III, M.D., Associate Professor, Department of Obstetrics and Gynecology, Cornell University Medical College, New York
Summary not received

10:10 a.m. / Clinical Significance of Hydronephrosis in Irradiated Carcinoma of the Cervix
ANTHONY R. FERNICOLA, M.D., Attending in Urology, St. James Hospital, Newark

Hydronephrosis in patients with carcinoma of the cervix generally signifies the presence of metastatic disease which involves the pelvic portion of the ureter. This paper will demonstrate by x-ray evidence the behavior of hydronephrosis which develops in patients who have received radiotherapy for carcinoma of the cervix. The spontaneous disappearance of hydronephrosis in these patients is apparently due to a reversible radiation ureteropathy not heretofore recognized as a clinical entity. These observations indicate that a decision to buy time can spare countless women the necessity of undergoing corrective major surgery for hydronephrosis.

10:30 a.m. / Ureter and the Gynecologist
JAMES L. BREEN, M.D., Associate Professor, Department of Obstetrics and Gynecology, New Jersey College of Medicine, Jersey City; and Director, Department of Obstetrics and Gynecology, Newark City Hospital, Newark

There will be a discussion of the ureter in its various anatomic segments as related to gynecologic pelvic pathology. Individual case reports will be presented to depict the problems encountered by the gynecologist during pelvic surgery.

10:50 a.m. / Panel Discussion
Moderator: ANTHONY R. FERNICOLA, M.D., Newark

11:45 a.m. / Visit to Exhibits

1:00 p.m. / Luncheon — Committee on Maternal and Infant Welfare and Field Physicians
Reservations: JOHN D. PREECE, M.D., 471 Bellevue Ave., Trenton

Monday Afternoon, May 15

Joint Session

Sections on:

Anesthesiology
Orthopedic Surgery
Surgery

Presiding

Adolph Wichman, M.D., Chairman
Section on Surgery

1:00 p.m. / Luncheon—New Jersey Orthopaedic Society
Reservations: JOHN W. BROMLEY, M.D., 588 East 27th St., Paterson

2:00 p.m. / Election of Section Officers for 1967-1968

2:15 p.m. / Symposium on Hand Injuries—Management-Primary and Secondary

Acute Hand Injury

LORING E. SYLVESTER, M.D., Attending in Surgery, Salem County Memorial Hospital, Salem
Summary not received

Orthopedic Aspects of the Injured Hand

ARTHUR D. DEVLIN, M.D., Chief of Orthopedics, St. James Hospital, Newark

A knowledge of the anatomy and function of the hand is essential for early and adequate treatment aimed at preventing severe permanent crippling deformities.

Anesthesia in the Management of the Acute Hand Injury and Allied Injuries

HAROLD S. SMALL, M.D., Anesthesiologist, Morristown Memorial Hospital, Morristown

To achieve our basic goal of minimizing risk, we must first be aware of the hazards we face in each situation and method. After trauma, gastric emptying is delayed, and regurgitation is common. Thus, the aspiration of vomitus is a hazard of general anesthesia. The means of reducing this hazard are discussed. Regional anesthesia of the hand may be produced by brachial plexus block in the axilla or neck by a variety of technics, by intravenous regional anesthesia, and by peripheral nerve blocks at the elbow and wrist. The means of minimizing the risk of a toxic local anesthetic reaction are discussed, as well as the management of such a crisis if it occurs.

Definitive Management of the Injured Hand

MICHAEL L. LEWIN, M.D., Senior Plastic Surgeon, St. Joseph Hospital, Paterson

The definitive reconstruction of hand injury will be discussed and illustrated by representative case material. The presentation will include comments on the architectural reconstruction of the disabled hand with particular emphasis on reconstruction of the thumb. This will include bone grafts. The author will discuss restoration of the motor power by tendon grafts and tendon transfers. There will also be an explanation of the management of the sensory loss by sensory island flaps.

Panel Discussion

Moderator: ADOLPH WICHMAN, M.D., Chief of Surgery, St. Clare's Hospital, Denville

4:15 p.m. / Visit to exhibits

Joint Session

Sections on:

Cardiovascular Diseases
Chest Diseases
General Practice

Presiding

Gilbert E. Levinson, M.D., Chairman
Section on Cardiovascular Diseases

12:30 p.m. / Luncheon — New Jersey Chapter, American College of Chest Physicians

Reservations: DAVID WIENER, M.D., 22 Ball St., Irvington

2:00 p.m. / Election of Section Officers for 1967-1968

2:15 p.m. / Symposium on Problems of Office Management

Congenital Heart Disease

ALEXANDER S. NADAS, M.D., Clinical Professor of Pediatrics, Harvard Medical School; and Chief, Cardiology Division, Children's Hospital Medical Center, Boston

Summary not received

2:40 p.m. / Question and Answer Period

3:00 p.m. / Chronic Pulmonary Diseases

GUSTAVE A. LAURENZI, M.D., Associate Professor of Medicine, New Jersey College of Medicine, Jersey City; and Assistant Attending Physician, The Mountainside Hospital, Montclair

Summary not received

3:20 p.m. / Question and Answer Period

3:40 p.m. / Peripheral Vascular Disease

VICTOR PARSONNET, M.D., Millburn; Clinical Associate Professor of Surgery, New Jersey College of Medicine, Jersey City; and Attending in Surgery, Newark Beth Israel Hospital, Newark

The office management of occlusive arterial disease of the lower extremities will be discussed with relation to indications for angiography and reconstructive surgery. Technics to be discussed will include isotope clearance tests, circulation time, oscillometry, and occlusion and impedance plethysinography. Empasis will be placed on methods of diagnosis and the assessment of the degree of impairment of the circulation.

4:00 p.m. / Question and Answer Period

4:15 p.m. / Visit to Exhibits

Joint Session

Sections on:

Ophthalmology
Otolaryngology

Presiding

Oram R. Kline, Jr., M.D., Chairman
Section on Ophthalmology; and
August P. Ciell, M.D., Chairman
Section on Otolaryngology

2:00 p.m. / Election of Section Officers for 1967-1968

2:15 p.m. / Ophthalmodynamometry

ROBISON D. HARLEY, M.D., Atlantic City; Professor of Ophthalmology, Temple University School of Medicine, Philadelphia

Ophthalmodynamometry is an effective diagnostic aid for the interpretation and elucidation of symptoms relative to certain cerebrovascular insufficiency syndromes. Selected case presentations will illustrate characteristic symptoms and data.

2:35 p.m. / Use of the Photocoagulator, Laser and Cryosurgical Technics in Treatment of Retinal Disorders

JOHN C. LEAMAN, M.D., Director, Retina Service, Newark Eye and Ear Infirmary, Newark; and Assistant Clinical Professor, New Jersey College of Medicine, Jersey City

Here reviewed will be a comparison of photocoagulation, laser, and cryosurgical technics in retinal surgery. Retinal tears, and criteria for treatment will be discussed. Also presented will be a series of retinal tears treated with cryosurgery.

3:00 p.m. / Microsurgery

RICHARD U. STERN, M.D., Assistant Attending in Ophthalmology, Newark Eye and Ear Infirmary, Newark; and Instructor, New Jersey College of Medicine, Jersey City

The use of the high power magnification in order clearly to visualize minute ocular structures and carefully manipulate them with minimum trauma has been greatly advanced in the past ten years by the use of operating microscopes and improved illumination. Improved instrumentation also has reduced the surgical accidents which may occur during manipulation of eye structures. The introduction of cryosurgery for extraction of the lens has been a major advance. Comparative studies with various cryosurgical instruments with motion pictures will be presented.

3:20 p.m. / Therapeutic Bronchoscopy

WILLIAM H. BALTZELL, M.D., Assistant Professor of Otolaryngology, Jefferson Medical College Hospital, Philadelphia

Here offered is a brief discussion of the historical background and changing needs for therapeutic bronchoscopy. There will be a review of technic and care of patients, with special precautions, followed by case presentations from several medical disciplines.

3:45 p.m. / Tracheostomy Today

F. ROBERT HAASE, M.D., Attending in Otorhinolaryngology, Fitkin Memorial Hospital, Neptune

Tracheostomy has been used for many years for the relief of laryngeal obstruction. In recent years it has been used in unconscious patients for reduction of resistance and dead space in addition to tracheal toilet. Even more recently, tracheostomy has been further adapted as a vehicle for intermittent positive pressure breathing. This paper covers the complications associated with this type of usage.

4:05 p.m. / Question and Answer Period

4:15 p.m. / Visit to Exhibits

Joint Session

Section on:

Psychiatry and Neurology

Presiding

Bernard R. Goldberg, M.D., Chairman
Section on Psychiatry and Neurology

2:00 p.m. / Election of Section Officers for 1967-1968

2:15 p.m. / Symposium on Learning Disabilities and Behavioral Problems in the School Aged Child

Neurologic Aspects

MALVIN COLE, M.D., Division of Neurology, New Jersey College of Medicine, Jersey City

Differential diagnosis requires consideration of mental retardation; gross structural disease of brain (e.g. anoxic, vascular, or degenerative); primary emotional or behavioral disorders; and specific learning disability termed "limited cerebral dysfunction of childhood." In the presence of the latter, it is necessary to separate the basic defect from secondary or behavioral abnormalities which are present and disabling in the majority of patients. The incidence of "limited cerebral dysfunction of childhood" is unknown, but is generally thought to be in the range of 2 to 5 per cent of the population. Not all of these patients have the same type of defect; meticulous classification is needed in order to think of precise therapy. These patients have normal intelligence and there has been no demonstrable associated anatomic lesion. In most, there is a personal or family history of sinistrality or ambilaterality. There is also, in three of four patients a family history of similar neuropsychologic deficits. The defect is viewed as an heredo-familial abnormality of cerebral organization rather than acquired structural lesions of brain.

EENT Aspects

ALFONSE A. CINOTTI, M.D., Chief, Division of Ophthalmology, New Jersey College of Medicine, Jersey City

Since most knowledge is introduced to a child either through the sense of sight or hearing, it is only natural to consider disorders of these senses as causes of learning disabilities. Visual and auditory disturbances are responsible for reading disabilities in a small proportion of children. A thorough examination of the eyes and ears should be instituted, with correction of any defect which might aggravate the primary condition. The relationship of ocular muscle imbalances to reading difficulties will be considered in some detail.

Psychoeducational Aspects

DANIEL RINGELHEIM, Ph.D., Associate Professor of Educational Psychology; and Coordinator, Training Program in Mental Retardation, New York University, New York

Summary not received

As the Child Psychiatrist Sees It

RICHARD M. SILBERSTEIN, M.D., Medical Director, Staten Island Mental Health Center, Staten Island

Adolescents normally vascillate in behavior from extremes of hedonism to asceticism. Behavior at either of these poles is often a major factor in learning failure in America. In addition, cumulative learning failures which finally catch up with children in their teens, conflict between dependence and independence, and misguided adolescent rebellion contribute to learning problems in high school and early college years.

Discussor: ARNOLD KALLEN, M.D., Newark

4:15 p.m. / Visit to Exhibits

Wednesday Morning, May 17

Section on:

Dermatology

Presiding

Hugh McCulloch, Jr., M.D., Chairman
Section on Dermatology

9:30 a.m. / Election of Section Officers for 1967-1968

9:45 a.m. / Recent Advances in Surgical Treatment of Male Type Alopecia

ROBERT A. BERGER, M.D., Associate Attending in Dermatology, Mt. Sinai Hospital, New York

Summary not received

10:10 a.m. / Combined Modalities in Treatment of Keloids

HARRY C. GOLDBERG, M.D., Chief, Department of Dermatology, Muhlenberg Hospital, Plainfield

The treatment of keloids presents a real challenge. Are x-rays useful? Opinions vary. Dry ice has often been a safe and modestly effective agent. It may be used especially for smaller and younger keloids. When the corticosteroid drugs came into being, they were used for intralesional injections of keloids. The method I have found most useful is to cut the keloid level with the adjacent skin surface. The remaining portion is then injected with dexamethasone acetate by a special technic. Kodachromes will show the course of keloids so treated.

10:30 a.m. / Hidradenitis Suppurative

WALTER M. RYAN, Jr., M.D., Chief, Department of Plastic and Reconstructive Surgery, Monmouth Medical Center, Long Branch

This paper will discuss the anatomy and physiology of the sweat glands in the axillar, and etiology and treatment of the condition from the simple acute case to the chronic protracted case. These will be illustrated by drawings and slides.

10:50 a.m. / Repair of Skin Defects by Other Than Simple Closure

JEROME GELB, M.D., Chief, Department of Plastic Surgery, Newark Beth Israel Hospital, Newark

Closure of skin defects resulting from tumor excision and trauma, using the various methods of plastic surgery, other than the simple procedure of primary closure, will be discussed. Examples of the use of advancement flaps, interpolated flaps, partial and full thickness grafts, composite grafts and pedicle grafts from a distant site, will be illustrated.

11:10 a.m. / Discussion

11:45 a.m. / Visit to Exhibits

Section on:

Metabolism

Presiding

Henry Terwedow, M.D., Chairman
Section on Metabolism

9:30 a.m. / Election of Section Officers for 1967-1968

9:45 a.m. / Diabetes in Pregnancy

HENRY DOLGER, M.D., Mt. Sinai Hospital, New York

Since 1952 the Prenatal Diabetes Clinic at the Mount Sinai Hospital has achieved a fetal salvage rate of 86 per cent for all diabetic pregnancies except for Class A where this rate was 96 per cent. Five per cent of all prenatal patients were discovered to be Class A diabetics on careful routine scrutiny. Ninety-seven diabetic pregnancies were treated with an oral agent—tolbutamide—and the results of this special series will be presented.

10:10 a.m. / Diagnosis and Prevention of Early Diabetes

LEO P. KRALL, M.D., Joslin Clinic, Boston

The literature on diabetes is a confused welter of uncoordinated and sometimes unrelated terms such as "pre-," "chemical," "pre-clinical," "latent," and other diabetes. In spite of the passage of 47 years since the discovery of insulin there is no general agreement on the definition, diagnosis, or need for treatment of diabetes. Most of us agree that diabetes starts long before we are aware of it. We have long demonstrated our inability meaningfully to divert the course of long established and clinically rampant diabetes. Thus, it is increasingly important aggressively to seek out diabetes before it becomes "clinically" established. Data are here presented to show the impact of early or pre-clinical diabetes on one segment of a modern industry, and how preventive measures may be useful in ameliorating or blunting the clinical impact of early diabetes. The great modern metabolic struggle is now between overt and covert diabetes.

10:35 a.m. / Chronic Renal Insufficiency; Some Modern Ideas

ASHTON B. MORRISON, M.D., Plainfield; Professor and Chairman, Department of Pathology, Rutgers Medical School, Rutgers—The State University, New Brunswick

Chronic renal failure occurs in diseases where progressive destruction and scarring of the kidney are found. A common pattern of metabolic and functional changes is found in chronic renal failure which is characterized by rising levels of urea, creatinine, phosphate, and sulfate in the blood serum. In early stages, patients fail to form a concentrated urine. Later they show a defect in diluting the urine. This paper will discuss how the functional changes which are found in chronic renal failure are brought about.

11:00 a.m. / Discussion

11:45 a.m. / Visit to Exhibits

Special Co-sponsored Scientific Sessions

Tuesday Morning, May 16

Accidental Poisoning

Arranged and presented in cooperation with the Section on Occupational Medicine and Hygiene of The Academy of Medicine of New Jersey

9:00 a.m. / Showing of Films

9:45 a.m. / Symposium on Accidental Poisoning

Moderator: HAROLD H. GOLZ, M.D., Corporate Medical Director, American Cyanamid Company, Wayne

Home Products and Potential Intoxication

HENRY L. VERHULST, Chief, Poison Control Branch, Division of Direct Health Services, Bureau of Health Services, U. S. Public Health Service, Arlington, Virginia

Each year hundreds of thousands of children are involved in the accidental ingestion of medicines or household products. From an analysis of 65,000 reports to poison control centers in one recent year, we have knowledge of the relative distribution of ingestions in children under five years. However, there is not necessarily a direct relationship between the number of ingestions of a product and morbidity. The Poison Control Branch's experience, gained from reports from poison control centers, makes it possible to demonstrate categories of products where minimum injury is expected as well as those which require immediate medical attention.

Toxicity of Hydrocarbons

HORACE W. GERARDE, M.D., Medical Director, Becton Dickinson Division, Becton Dickinson and Co., Rutherford

Hydrocarbons are extensively used as solvents for paints, plastics, pesticides and a wide variety of other materials, as fuels for heating and cooking, as a source of energy in many types of engines and as starting materials and intermediates for synthesis in the chemical and petrochemical industries. Because of their wide use in our economy, the potential for human exposure is probably greater than with any other class of organic compounds. A wide variety of hydrocarbon molecules is also present in the secretions and in the tissues of plants and animals. In general, with the exception of benzene, the hydrocarbons are considered to have a low to moderate degree of toxicity. Benzene is a potent myelotoxic agent. One of the principal hazards associated with the use of low viscosity hydrocarbons is chemical pneumonitis resulting from accidental ingestion. This rapidly developing pulmonary edema and hemorrhage is to be distinguished from "lipoid pneumonia," which results from the aspiration of mineral oil. The latter is a low grade, localized, chronic foreign-body type of reaction which is usually asymptomatic.

The Diagnosis by the Medical Examiner of Accidental Poisoning

JOSEPH H. DAVIS, M.D., Chief Medical Examiner, Dade County, Miami, Florida

The diagnosis by the medical examiner of poisoning is a retrospective process. It starts with the discovery of the death of the victim. The foremost attribute to a diagnosis is a law adequate enough to enable the medical examiner to investigate without restriction and to exercise his scientific zeal to the utmost. Commensurate with his responsibility should be the authority to perform unlimited autopsies and laboratory tests at his discretion rather than at the discretion of some other public official such as a prosecuting attorney. He should be vitally concerned with the community problems of public health, social welfare, and legislative matters pertaining to health and medical practice.

Once these facilities are available, the poison death investigation becomes multiphasic. The initial scene investigation into the circumstances, the external and internal examination of the body, and subsequent laboratory tests all vary according to the circumstances. In some cases, the scene must be reinvestigated. Also, there may be need for further gross and microscopic studies of tissues and additional laboratory tests before the cause of death may be finally determined. The classification of a poison death as "accidental" should never be made by default. When faced with a poor investigation or a complete investigation without a preponderance of evidence, it is better to leave the designation as unclassified or undetermined.

11:15 a.m. / Discussion

Members of the Society are invited to submit questions for discussion. These may be mailed to the moderator in advance of the meeting. They will be discussed in the order in which they are received.

11:45 a.m. / Visit to Exhibits

Differential Diagnosis of Schizophrenic Reactions

Arranged and presented in cooperation with the Bureau of Research in Neurology and Psychiatry, Division of Mental Health and Hospitals, New Jersey State Department of Institutions and Agencies.

9:30 a.m. / Panel—Promising Developments in the Differential Diagnosis and Evaluation of Schizophrenic Reactions

Moderator: PAUL HAUN, M.D., Director of Psychiatric Education, Division of Mental Health and Hospitals, New Jersey State Department of Institutions and Agencies, Trenton

Neuropharmacological Studies at the Bureau of Research

CARL C. PFEIFFER, M.D., Chief, Neuropharmacology Section, Bureau of

Research, New Jersey State Department of Institutions and Agencies, Princeton

There are reports on the effectiveness of niacin and its coenzyme NAD in the treatment of schizophrenics. This has led us to study several compounds of this type in normal subjects and patients. The most active combination was that of adenosine plus niacin. This produced a rise in serum uric acid and an increase in mean energy content of the electroencephalogram of male volunteer subjects. Behaviorally, schizophrenic patients on this combination showed greater emotionality and drive as their serum uric acid levels rose. Those elevated levels return to normal within four days after therapy.

This increase in "nervous drive" is in accord with various reports on the natural levels of serum uric acid. Stetten and also Orowan and Haldane correlate gout or high uric acid levels with intelligence and "drive." These data will be reviewed and additional studies will be reported about our attempts to correlate serum purine levels and metabolism with human behavior.

Technics of Evaluation of New Drugs for Schizophrenia

A. ARTHUR SUGARMAN, M.D., Chief, Investigative Psychiatry Section, Bureau of Research, New Jersey State Department of Institutions and Agencies, Princeton

This paper opens with mention of the origins and preclinical screening of new drugs. Then technics and problems of early clinical evaluation are described. Attention is given to problems arising from the nature of the drug, the diagnosis and individual characteristics of the patient, the effective dose level, the therapist, the setting, the measures of status and change, and the medical and other observers.

The Scientific Exploration of the Worlds of the Mentally Ill

A. MONEIM EL-MELIGI, Ph.D., Director of Psychology, Ocean County Rehabilitation Center at Pinehaven, Bayville; and Visiting Professor of Psychology, Rutgers—The State University, New Brunswick

Summary not received

The Quantitative EEG and Drug Action

LEONIDE GOLDSTEIN, D.Sc., Senior Scientist-Psychopharmacologist, Bureau of Research, New Jersey State Department of Institutions and Agencies, Princeton

The method of "amplitude analysis" of brain waves has been used to measure in normal subjects and chronic male schizophrenics the resting electroencephalogram and the changes brought about by psychoactive drugs. Our original findings of a sustained hypovariability in the EEG of patients has been confirmed and extended. Drug trials have revealed in schizophrenics a high correlation between behavioral improvement and increase in the level of brain wave variability. In normal subjects, drugs such as aspirin, and vitamins such as ascorbic acid and nicotinic acid, have been found to produce "anti-anxiety" effects.

11:45 a.m. / Visit to Exhibits

Diabetes Detection

Arranged and presented in cooperation with the Division of Chronic Illness Control of the New Jersey State Department of Health

2:00 p.m. / Symposium on Oxford (Mass.) Revisited: An Evaluation of Diabetes Detection Over the Past Two Decades and Its Significance in 1967

Moderator: ARTHUR KROSNICK, M.D., Coordinator, Diabetes, Endocrine, and Metabolic Disease Program, Division of Chronic Illness Control, New Jersey State Department of Health, Trenton

Historical Background of the Study

HUGH L. C. WILKERSON, M.D., Deputy State Health Officer, Division of Public Health, Concord New Hampshire

Summary not received

Methods and Results of the Study

JOHN O'SULLIVAN, M.D., Medical Director, Diabetes and Arthritis Branch, Field Research Section, Brighton, Massachusetts

Summary not received

Significance of the Study

GLEN W. McDONALD, M.D., Chief, Diabetes and Arthritis Program, National Center for Chronic Disease Control, Department of Health, Education and Welfare, Washington

Summary not received

4:15 p.m. / Visit to Exhibits

Computers In Medicine

Arranged and presented in cooperation with the New Jersey Society of Pathologists

2:00 p.m. / Symposium on Computers in Medicine

Moderator: MARTIN R. RUSH, M.D., Director of Laboratories, Monmouth Medical Center, Long Branch

Hospital Information Systems (H.I.S.)

R. H. ATKINSON, Darien, Conn.; Special Representative, Medical Industry, IBM Corporation, New York

Here will be offered a summarization of current usage of computers in hospitals, including a discussion of laboratory information systems, clinical decision support systems, and a terminal-based communication system.

Clinical Decisions Support Systems

F. MAXTON MAUNEY, M.D., Consultant to IBM Corporation, Duke University Medical Center, Durham, North Carolina

Summary not received

Automated Clinical Laboratories
HAL ORTON, Washington, D. C.; Special Representative, Medical Industry, IBM Corporation, New York
Summary not received

Multiple Analysis—A Fad, or An Urgent Need
EDWIN WHITEHEAD, President, Technicon Instruments Corporation, Chauncey, New York

Today, more than 300 clinical laboratories are providing multiple sequential analyses on all sera submitted to the laboratory, as well as performing such analyses on all admissions to their affiliated hospitals. Surveys have been conducted on the significance of findings of this unsolicited laboratory information. We will present a brief review of how sequential analysis is accomplished, and the significance of the data and its implications will be discussed.

4:45 p.m. / Visit to Exhibits

EXHIBITS

A THREE-WAY TREAT

One of the colorful aspects of any medical convention is the interesting array of exhibits. This year, your Society has provided three classes of exhibits:

INFORMATIONAL

SCIENTIFIC

TECHNICAL

Take the time to inspect each one—not just a look-see . . . but a real indepth study. You will be surprised at the wealth of new information.

NEW JERSEY ORTHOPAEDIC SOCIETY

Monday, May 15, 1967
Haddon Hall, Atlantic City

9:15 a.m.—Treatment of Fractures of the Femur With Dual Onlay Plates
Andrew C. Ruoff, III, M.D., Pompton Plains — Discussion will be led by Dr. J. M. Cotler.

9:40 a.m.—The Perforated Cruciate Intramedullary Nail
Michael T. Modny, M.D., Montclair — Dr. J. J. Flanagan will open the discussion.

10:20 a.m.—An Operative Approach to Traumatic Arthritis of the Elbow
Harry Merliss, M.D., Hackensack — Dr. A. G. Hudacek will lead the discussion.

11:15 a.m.—The Evaluation of Treatment in Club Foot Deformity
Rudolph C. Dangelmajer, M.D., Summit — Discussion will be opened by Dr. J. C. McCauley, Professor of Orthopedic Surgery, New York University.

12:00 noon—Lateral Spine Fusion in Laminectomy Failures
George Truchly, M.D., Associate Clinical Professor of Orthopedic Surgery, New York University.

1.00 p.m.—Luncheon: For reservations write to John W. Bromley, M.D., 588 East 27th Street, Paterson

MOTION PICTURE THEATRE

Monday and Tuesday, May 15 and 16
Morning and Afternoon

Wednesday, May 17
Morning

Arranged and presented through the cooperation of the Ciba Pharmaceutical Company, Summit.

9:45 a.m. / Diuresis

Produced by Ciba Pharmaceutical Company

A comprehensive film on the kidney including discussion of anatomy, physiology, function, formation of urine, and hairpin countercurrent principle (mostly animation). Also demonstrated and discussed are patients with glomerulonephritis, nephrotic syndrome, pyelonephritis, chronic nephritis, congestive heart failure, and hepatic cirrhosis. The mechanism of action and usefulness of various diuretics are stressed.

10:35 a .m. / Cerebral Vascular Diseases: The Challenge of Management

Produced by the American Heart Association

This medical teaching film will acquaint general practitioners and nurses with concepts and technics basic to the management of persons who have suffered "strokes." It shows how measures can be carried out by the family physician even though he may be working without the help of specialists, in hospitals which have no physical therapy services, and with patients whose long term treatment must be carried out in their own homes. The common premonitory signs of a stroke are demonstrated. Also shown are emergency measures at the time of a stroke. The correct positioning and passive exercises (which should start soon after admission to the hospital) are shown. Further illustrated is a progressive course of passive to active exercises for the homebound patient during his gradual recovery. The doctor's responsibilites as a family counselor at the time when many emotional problems confront the patient and his family are stressed.

11:15 a.m. / Radioisotope Scanning in The Clinical Management of Patients

Millard N. Croll, M.D., Philadelphia

This film is a clinical presentation of the application of radioactive drugs in the diagnosis of thyroid disease, disease associated with the spleen, for localization of brain tumors, for detection of liver pathology, for detection and localization of bone tumors —primary and metastatic—and for the detection of regional pulmonary blood flow.

2:00 p.m. / Psychiatric Technics for The Family Doctor

Robert Matthews, M.D., Professor of Psychiatry, Jefferson Medical College, and B. Wheeler Jenkins, M.D., Philadelphia

Here is a live telecast sponsored by the American Academy of General Practice. Dr. Matthews discusses the role of a general practitioner in treating neuropsychiatric patients. Dr. Jenkins, a generalist, interviews three patients with various mental difficulties, with written comments by Dr. Matthews superimposed.

3:00 p.m. / The Management of Severe Burns in Children

E. Thomas Boles, Jr., M.D., Columbus, Ohio

Reviewed here is an Ohio hospital's experience in the management of burned children. The photographic record includes the treatment upon arrival of one patient in the emergency room immediately following a burn accident. Treatment is followed through the successful completion of grafting procedures. Immediate care of the burn wound, procedures during the shock phase, fluid replacement, prevention of infection, proper nutrition, prevention of anemia, secondary care of the burn wound, grafting, and prevention of infection are demonstrated.

3:30 p.m. / Chronic Bronchitis—A Team Affair

Produced by Ayerst Laboratories

Filmed at Brompton Hospital in London by Eothen Films, Ltd., this was premiered at the 1965 Annual Meeting of the American Medical Association in New York City. The film demonstrates that the management of chronic bronchitis is a team affair involving the general practitioner, pathologist, chest physician, bacteriologist, and physiotherapist. The disease is discussed from the pathological, clinical, and bacteriologic standpoints.

Golden Merit Award Ceremony

Saturday Afternoon / May 13 / 2:00 p.m.

The Golden Merit Award, established in 1957, is conferred upon every member of The Medical Society of New Jersey who has held the degree of Doctor of Medicine for fifty years.

Presiding

Joseph R. Jehl, M.D., President

Master of Ceremonies

Harry F. Suter, M.D., Chairman, Council on Public Relations

Marshals

Presidents of component societies whose members are receiving awards

followed by

Reception for Award Recipients and Their Families

1967 Annual Meeting

INFORMATIONAL EXHIBITS

Monday and Tuesday, May 15 and 16
9:00 a.m. to 5:00 p.m.

Wednesday, May 17
9:00 a.m. to 12:00 noon

Overlook Hospital Cardiac Monitor Unit Procedure

W. Austin Tansey, M.D., Victor Parsonnet, M.D., Warren B. Nestler, M.D., and William F. Minogue, M.D., Overlook Hospital, Summit

It has been demonstrated that half of the deaths attributed to coronary artery disease are related to an arrhythmia. The Cardiac Monitor Unit can help combat this danger. In this exhibit we outline our procedure at Overlook Hospital for detection, treatment, and prevention of the arrhythmia. Here, too, we review the results of this enterprise. In our opinion, such a unit is a necessary complement of medical practice in all community hospitals.

The Physician's Role In Air Pollution

Committee on Air Pollution Control, The Medical Society of New Jersey

This is a demonstration of the role of the physician in (1) preventive technics and definitive treatment of a population exposed to air pollutants (telemetered air pollution levels—air alert—New Jersey State Department of Health); (2) helping to set air criteria levels (a) research projects in New Jersey, (b) research throughout world on physiologic effects of pollutants, (c) effects of air pollutants on growth and development of plants; and (3) public education through physician knowledge and leadership, activities of county society air pollution committees, state conferences, public forums, speakers' bureaus, and liaison with citizen groups.

Your Medical Assistant

New Jersey State Medical Assistants Association, Inc.

This display offers information about the American Association of Medical Assistants. Outlined are its aims and purposes, some of the activities engaged in by the New Jersey State Medical Assistants Association, and its relation to the physicians. The background will display photographs showing medical assistants performing various duties. Interesting pamphlets will be available for distribution.

Job Opportunities In Mental Health

Division of Mental Health, New Jersey State Department of Institutions and Agencies

New Jersey's exhibit will concentrate on the wide variety of excellent job opportunities in the seven psychiatric institutions of the Division of Mental Health and Hospitals of the State Department of Institutions and Agencies. Brochures will be available, including a general informational brochure on the Division of Mental Health and Hospitals itself, plus a special one on the psychiatric residency program in the State psychiatric hospitals and N.J.N.P.I. New Jersey is the only state in the union (with more than one state mental institute) to have all of its psychiatric residency training programs approved by the American Medical Association.

Implementation Of Title XIX

Division of Public Welfare, New Jersey State Department of Institutions and Agencies

The exhibit by New Jersey's Division of Public Welfare will explain what services will be available with the New Title XIX, Medical Assistance Program. We will also try to show what the State and Federal matching funds will be for a few of the different programs being considered.

Resuscitation In The Community Hospital —Factors In A Successful Program

Theodore H. Goldberg, M.D., Michael Yablonski, M.D., Joan Marks, R.N., and Associates, Hackensack Hospital, Hackensack

Hackensack Hospital has had an effective hospital-wide resuscitation program since 1964. The program has been carefully studied to determine its effectiveness. Modifications have been made on the basis of these studies. This exhibit will reflect all the ingredients of a successful resuscitation program in a community hospital. It will include a step by step analysis of the organization of such a program, the equipment and training of personnel necessary for an effective program, the results of such a program and illustrations, slides and video tapes of resuscitation procedures. Also, actual demonstrations of both emergency and definitive resuscitation will be given at frequent intervals throughout the day.

The Major Uncontrolled Cancer— Carcinoma Of The Breast

American Cancer Society, New Jersey Division, Inc.

This exhibit directs attention to the breast cancer problem which is still largely unanswered in this country. This is the number one cancer in women in the United States both in incidence (64,000 estimated new cases for 1967) and mortality (26,900 deaths anticipated in 1967). Over-all death rates have not declined despite more than 60 years of surgical and public educational efforts. The varying methods of management of suspected or actual breast cancer are outlined, and the value of early diagnosis and proper treatment is reaffirmed.

The Effects Of Pesticides On Man And His Environment

Norman Plummer, M.D. and Ray R. Kriner,Ph.D., New Jersey State Department of Health, Trenton; and College of Agriculture and Environmental Science, Rutgers—The State University, New Brunswick

The aim of this exhibit is to inform physicians of two extensive studies on pesticides now under way in our state. Rutgers University is carrying out a study supported by the United States Department of Agriculture. This is on the "Fate of Pesticides in the Environment," especially in soil, water, and plant life. The State Department of Health also has a program supported by the United States Public Health Service on the effects of pesticides on human beings. There will be available evidence that human intoxication with pesticides does occur and can be diagnosed. It will be emphasized that pesticides are poisons; carelessly used, they are hazardous; carefully used, they are relatively safe.

The Academy Of Medicine Of New Jersey

Bloomfield

This interesting display will show the function of the Academy of Medicine of New Jersey, its growth and plans for the future. You will see a profile of the past, present, and anticipated future of New Jersey's premier scientific medical organization: the Academy of Medicine. We have some exciting plans for the Academy in the near future. Come and see them.

1967 Annual Meeting

SCIENTIFIC EXHIBITS

Monday and Tuesday, May 15 and 16
9:00 a.m. to 5:00 p.m.

Wednesday, May 17
9:00 a.m. to 12:00 noon

Diagnosis And Operative Treatment For Aorto-Iliac Occlusive Disease

Howard C. Baron, M.D., Jewish Memorial Hospital, New York

Shown here are steps in the diagnosis and operative treatment of atherosclerotic vascular disease of the terminal aorta and iliac arteries. The technic of endarterectomy of the aorto-iliac segment is displayed. Also presented are aortograms illustrating the arterial pathology. There is a brief review of the indications for operation with a summary of results. As part of the exhibit, there is a color sound movie illustrating diagnostic aortograms and pertinent operative sequences. The sound track may be heard through a series of 6 microphones audible only to the individual listener.

The Basic Approach To The Treatment Of Traumatic Injuries By Plastic Surgery

Walter M. Ryan, Jr., M.D., Attending Plastic Surgeon, Jersey Shore Medical Center, Neptune City

This exhibit reviews what can be done by plastic surgery in treating the results of trauma. Automobile accidents are considered first with a presentation of the effects of lacerations and avulsions and with a special focus on facial fractures. Also displayed are problems connected with hand injuries, burns, and scar contractures.

Stapes Surgery

Alan Austin Scheer, M.D. and Jack Milowsky, M.D., New York Polyclinic Hospital and Post-Graduate Medical School, New York

Stapedectomy is the current treatment of otosclerotic deafness. In this exhibit, stereophonic headphones will enable the observer to enter the world of the hard of hearing. The pathology and diagnosis will be narrated along with a movie showing the steps of the stapedectomy. Specimens under operating microscopes will be available.

Modern Concepts Of Otitis Media

Myron J. Shapiro, M.D. and Harvey P. Yeager, M.D., Irvington

One half of this exhibit space is devoted to a motion picture with sound track (heard through headphones) describing various stages of otitis media with particular emphasis on the problems of serous otitis media. The remainder of the exhibit illustrates problems of acute otitis media with bacterial studies and antibiotic treatment. At this booth, you will have an opportunity to do myingotomy on a manikin.

Reconstructive Middle Ear Surgery—Tympanoplasty

Julio T. Noguera, M.D., F. Robert Haase, M.D., and William H. Peterson, M.A., Shore Medical Group, Neptune City

Here will be exemplified the possibilities of reconstructing the middle ear sound transmitting system after it has been destroyed by radical mastoidectomy, cholesteatoma or otitis media. Drawings portray the normal middle ear system, the defects which can occur, and the various types of prostheses used with tympanoplasty for reconstructive purposes. In addition, the early results of a pilot study, involving the use of a new type of prosthesis, are presented. Hearing loss findings in conjunction with three variations in the new prosthesis will be shown. The actual prostheses types will be available for viewing. The experimenters conclude that one specified variation of their new prosthesis gives marked hearing improvement over time. Further research is needed to determine whether success could be achieved in a greater number of cases.

Office Fabrication Of Foot Supports

Henry Briggs, M.D., East Orange

To understand foot supports, you should see how they are made. Here you will find a demonstration of the office manufacturing of these supports. This will be displayed through pictures as well as actual demonstrations.

Maximal Hemostasis By Pursestring Prostatectomy

Maxwell Maloment, M.D. and Howard B. Kern, M.D., Veterans Administration Hospital, East Orange

A frequent complication during prostatectomies (suprapubic, retropubic or transvesico approaches) is the occurrence of severe postoperative hemorrhage. This is usually equivalent to the amount of blood lost during surgery. The advantages of the pursestring suture are: separation of the bladder cavity from the prostatic fossa permitting free drainage of urine, primary closure, irrigation of the urethral catheters unnecessary, and early removal of the catheter. The advantages are conducive to a shorter hospitalization for the patient.

Rhinoplasty Technic

William C. Conroy, M.D., The Mountainside Hospital, Montclair

Illustration panels here display rhinoplasty technics including the author's method of tip reconstruction. There is discussion of how to screen candidates for rhinoplasty. Who will benefit? Who will not? What facial configurations lend themselves to the operation? A great many preoperative and postoperative pictures will demonstrate results with the author's method.

Posterior Proctotomy

Peter J. Guthorn, M.D. and Carl Guzzo, M.D., Shore Medical Group, Neptune City

Shown here is a brief resumé of tumors of the rectum and the rectosigmoid. A summary is offered of the types of approach to tumors in this region. The display includes a description of posterior proctotomy with its modifications, indications, and limitations. This modified procedure frequently permits complete removal of smaller tumors which are benign, of low grade, or localized malignancy, especially in the elderly. This procedure is particularly adaptable to removal of adenomas which are too large for endoscopic removal (papillary and villous adenomas), rectal carcinoids, and the like. It may also be a definitive procedure for removal of carcinomas in the poor risk elderly patient.

Aggressive Management Of Incomplete Abortion

James L. Breen, M.D., Newark City Hospital, Newark

During recent years, there has been an increasing awareness of benefits obtainable through outpatient management of the patient with the diagnosis of incomplete abortion. We all appreciate the desire to curtail the duration of therapy of disease by innovations consistent with acceptable professional standards. This has led us to evaluate the immediate uterine evacuation of all spontaneous incomplete abortions in over 1,500 patients in a large municipal hospital. Observations of importance in the management of this gynecologic procedure, as well as findings of significance for the hospital, are presented in the exhibit.

Atrial Septal Defect With Anomalous Pulmonary Venous Return: Adult Form

Lawrence Gilbert, M.D., I. Richard Zucker, M.D., Fred W. Wachtel, M.D., and Edwin L. Rothfeld, M.D., Newark Beth Israel Hospital, Newark

Here is a display of the etiologic development, common clinical course and pathologic sequence of atrial septal defect. It will demonstrate the clinical findings and point out the reason this lesion so often escapes detection. Here you will see the method of repairing this defect. The exhibit will compare preoperative and postoperative findings.

Personality Rehabilitation Through Plastic Surgery

Walter M. Ryan, Jr., M.D., Attending Plastic Surgeon, Jersey Shore Medical Center, Neptune City

Included in this unusual display will be evidences of personality rehabilitation through plastic surgery. The exhibit will cover facial skin tumors; cosmetic surgery of the breast; technics of dermabrasion; cosmetic surgery of the ears, nose, and chin; facial scar revision; and "face lifting."

Clinical Significance Of Hydronephrosis In Irradiated Carcinoma Of The Cervix

Anthony R. Fernicola, M.D., St. James Hospital, Newark

What happens to hydronephrosis in patients irradiated for carcinoma of the cervix? The exhibit offers radiologic evidence of the disappearance of hydronephrosis in these patients. The spontaneous regression of hydronephrosis is apparently the result of a reversible radiation ureteropathy heretofore unrecognized as a clinical entity. The display highlights the differentiation between obstructive ureterecstasis and pyelecstasis. The latter is irreversible and requires surgery. Non-obstructive ureterecstasis and pyelecstasis is reversible and non-surgical. These observations indicate that a decision to "buy time" can spare countless women the necessity of corrective major surgery for hydronephrosis.

Importance Of Histologic Sections In The Evaluation Of Bone Marrow

Bong Hak Hyun, M.D., C. Francis Varga, M.D., Kenneth C. Neiberg, M.D., and Bok Soo Kim, M.D., Muhlenberg Hospital, Plainfield

The material here demonstrated is gleaned from over 900 bone marrow examinations. Included are comparisons of both the smears and sections in all cases. Purpose of the exhibit is to show how examination of marrow sections (in concert with the smear) facilitates evaluation of marrow aspirates, especially with regard to cellularity, fibrosis, iron content, granulomata and metastatic tumor. Doctors will be reminded that both smears and sections should be examined to insure total evaluation of bone marrow aspirates.

Adenomyosis Of The Uterus And The Mechanism Of Its Production

Istvan A. Gaspar, M.D., Englewood Hospital, Englewood

The exhibit is based on a study of 70 cases of adenomyosis of the uterus. What is the actual mechanism by which the endometrium invades the myometrium? Two-thirds of the cases studied presented significant histologic findings, indicating the essentially intravascular invading nature of this disease process. Here you will see examples of the base of the endometrium with endometrial bulges into venous sinuses and string-like intravascular downgrowth of endometrium or stroma into the myometrium. Also shown are intravascular extensions and polypoid bulges of endometrium. Extension of the process by embolization also occurs. This is demonstrated in multiple microphotographs. The evidence seems to confirm Sampson's vascular transmission theory. You will also see a few microphotographs showing endometrial emboli within the uterine body following curettage in an occasional case of adenomyosis uteri.

Abnormal Intestinal Rotation And Fixation, And The Importance Of Roentgen Diagnosis

James R. Marquis, M.D., John W. Marquis, M.D., Frederick Strauss, M.D., and Eugenia Karvouni, M.D., Babies Hospital Unit, United Hospitals of Newark

Anomolies of rotation and fixation of the bowel may result in a varied symptom complex. Some are life threatening while others (such as vomiting, abdominal pain, or "celiac-like" syndrome) may go undiagnosed for months or years. Roentgen evaluation offers the best clue to diagnosis. This exhibit is based on a series of cases x-rayed during the past four years. The normal embryology of intestinal rotation, important abnormalities, and symptoms are described. The diagnostic roentgen criteria are presented through the use of slides and cinefluorograms. In certain cases, with minimal findings, the importance of cinefluorography is stressed.

Hemodialysis At Home

Norman Deane, M.D., Ginette Jacob, M.D., and Peter Missier, M.D., New York

Intermittent hemodialysis can maintain active life in patients with otherwise progressive and fatal renal disease. The high cost of institutional treatment and the limited facilities make dialysis at home a desirable solution for many patients. This exhibit presents three units for hemodialysis which have been used successfully in the home. Comparison is made of the Twin-Coil, Kiil and Dialung artificial kidneys in terms of the efficiency and time required for treatment with each unit. Frankly presented are the initial cost of each unit and the annual cost of treatment in the home.

Catheter Arteriography

E. Arthur Kratzman, M.D., Marvin Agran, M.D., and Michael Lazorek, M.D., Muhlenberg Hospital, Plainfield

Here is an exhibit which will demonstrate the diagnostic aspects of catheter arteriography in renal, pancreatic, splenic, aortic and great vessel pathology.

Urinary Tract Infections In Children

Donald E. Praiss, M.D. and Willard M. Drake, Jr., M.D., Cooper Hospital and Our Lady of Lourdes Hospital, Camden

This display enumerates the diagnostic studies currently available and the indications for them. The exhibit demonstrates pathologic abnormalities found in these surveys. Conservative, medical, and nonmedical methods of treatment are indicated as are major surgical methods. The aim of the display is to acquaint general practitioners and pediatricians with modern urologic practice.

Mesothelioma Associated With Asbestos Exposure

Maxwell Borow, M.D., Alfred Conston, M.D., Paul Smilow, M.D., Lawrence Livornese, M.D., Norbert Schalet, M.D., and Sylvan E. Moolten, M.D., Somerset Hospital, Somerville; and Middlesex General Hospital, New Brunswick

Until recently, mesothelioma was almost entirely unknown except in a pathologic curiosity. However, in the past several years, patients with this tumor arising either in the pleura or peritonium have been reported. All of these individuals also had asbestosis (pulmonary). Within the last 3 years, we have encountered 16 patients with this malignancy. All of them had asbestosis from either environmental or occupational exposure. It is apparent that the incidence of this malignancy is rising rapidly as is the incidence of asbestosis with the increasing application of this product in many different industries. This exhibit geographically presents the clinical, radiographic, and gross and microscopic pathologic features of this malignancy as encountered in our series.

The Delayed Effects Of Low Dose, Internally Emitted, Radiation

Carye-Belle Henle, M.D., Hyman Fisher, M.D., Samuel Ingraham, M.D., and Robert Bonda, D.D.S., Radium Research Project, New Jersey State Department of Health, West Orange

We had the opportunity of examining 154 former employees in the luminous dial industry. This exhibit reveals the radiation changes, and evaluates a premature aging in these subjects.

Do You Have A Problem In Treating Rheumatic Diseases?

Edward L. Tarpley, M.D., Nashville, Tennessee

This exhibit stresses the necessity for more accurate clinical observations to differentiate among the five main rheumatic disease entities: rheumatoid arthritis, rheumatoid ankylosing spondylitis, osteoarthritis, osteoporosis and gout. Differential data include sex, age group, laboratory findings, clinical signs, x-ray findings, range of possible therapy, and prognosis. The judicious use of physical and pharmacologic therapy may be expected to improve (or at least retard) the progress of the disease. In a clinical trial, the concomitant use of a combination of carisoprodol, acetophenetidin, and caffeine with a specific medication for the disease has proved of considerable help in achieving complete or marked relief in 70 per cent of patients with complaints of muscle pain, joint pain, muscle spasm, rigidity and difficult movement. Only minor side effects have been noted. For the physician interested in rheumatic diseases, this exhibit may offer practical solutions to some puzzling problems.

Newer Electrocardiographic Indicators Of Nitrate Activity In Man

Martin H. Wendkos, M.D., Veterans Administration Hospital, Coatesville, Pennsylvania

Glyceryl trinitrate, erythrityl tetranitrate, isosorbide dinitrate, and pentaerythritol tetranitrate are compared in terms of their capacity to: (a) abolish the electrocardiographic equivalent of the anginal state produced by ergotamine tartrate; and (b) normalize A-V conduction in patients with vagogenic heart block. Graphs which summarize the results derived from these methods tell us that glyceryl trinitrate, erythrityl tetranitrate and isosorbide dinitrate act with almost equal rapidity; isosorbide dinitrate acts the longest of these three compounds; only isosorbide dinitrate and pentaerythritol tetranitrate are effective perorally. The action of the former begins in 20 minutes and lasts for 2½ hours; the action of the latter begins in 60 to 90 minutes and lasts for 60 to 90 minutes.

Diagnosis and Treatment Of Osteoarthritis

Bernard M. Norcross, M.D. and Salvatore R. LaTona, M.D., University of Buffalo School of Medicine, Buffalo, New York

Osteoarthritis (degenerative joint disease) is a most frequent cause of joint complaints. It consists primarily of degeneration of articular cartilage. Genetic or metabolic factors, as yet unknown, rather than the concept of "wear and tear," may be the probable cause. This exhibit reviews the etiology, diagnosis, pathology, and therapy of this often mismanaged rheumatic disease. The pathologies of the hip joint are graphically presented through a three-dimensional model illustrating eburnation of exposed bone, erosion of articular cartilage, bony exostosis, and inflamed hypertrophied membrane.

The pathology of the lumbar spine, proximal interphangeal, and first metacarpal joints is illustrated by representative x-rays. Although the pathologic changes are irreversible, the therapeutic measures used to effect a prolonged improvement of this painful and disabling disease are presented in detail.

Current Diuretic Armamentarium: Clinical And Pharmacologic Appraisal

Albert N. Brest, M.D., Gaddo Onesti, M.D., Robert Seller, M.D., Osvaldo Ramirez, M.D., Charles Swartz, M.D., and John H. Mayer, M.D., Hahnemann Medical College and Hospital, Philadelphia

The purpose of this exhibit is to offer a clinical and pharmacologic appraisal of the current diuretic armamentarium. Sites of action of many diuretic drug groups are compared. Clinical pharmacology of the potent oral diuretics, antialdosterone drugs, ethacrynic acid and mercurials is described in graphic and verbal form. Data on combined diuretic drug regimens are also presented. Finally the clinical application of diuretic drugs in congestive heart failure and hypertension is summarized.

Nitrates And The Pedicle For Coronary Artery Disease

William H. Sewell, M.D. and Karlene Sewell, B.A., Guthrie Clinic Ltd., Sayre, Pennsylvania

Management of patients with coronary insufficiency is based on the findings of selective coronary cinearteriography by the Sones technic. Patients with no constriction as tight as ½ normal diameter get no cardiac medications. Those with constrictions of ½ to ¼ normal diameter are treated with nitrates, and there were no infarctions or coronary deaths. Those with tighter constrictions have a pedicle made from the mammary and two intercostal arteries implanted in the lateral, anterior, and/or posterior aspects of the left ventricle. The current operative mortality is 4 (2.5 per cent) of the 178 patients. Follow-up selective mammary cinearteriography showed good collateral in 95 per cent of the recent patients.

Comparison Of Oral Contraceptives

John S. Madara, M.D., Harry W. Fullerton, M.D., Charles E. Gilpatrick, M.D., Samuel P. Reed, M.D., and Albert J. Sungenis, M.D., Salem County Memorial Hospital, Salem

Here is a comparison of the relative effectiveness, side-effects, and patient acceptance of the various birth-control tablets on the market today. In each instance the exhibit demonstrates pill or tablet, shows how it is packaged, its contents, its dosage, what patients like and dislike about it, and any serious side-effects encountered. The conclusions reached are from the clinical experience of members of the Obstetric Department of the Salem County Memorial Hospital. It is hoped that the viewer may be able to choose the best contraceptive pill for specific cases.

Today's Problems Of Diuretic Therapy

Arthur Bernstein, M.D. and Melvin Odze, M.D., Newark Beth Israel Hospital ,Newark

Diuretics are among the most commonly used therapeutic agents. The development of newer diuretics having special areas of utility and unique effects on electrolytes increases the complexity of management. This exhibit will present the mechanisms of actions, the signs and symptoms and the management of problems such as potassium depletion, secondary hyperaldosteronism, dilutional hyponatremia and congestive heart failure with rising blood urea nitrogen. The problems of water and electrolyte depletion requiring better understanding and increased management considerations by the physician will be reviewed.

Use Of Furosemide In The Management Of Congestive Heart Failure

Duncan E. Hutcheon, M.D., New Jersey College of Medicine, Jersey City

The exhibit summarizes results of a clinical investigation of the action of furosemide in patients with congestive heart failure. Electrolyte balance studies are presented showing the increase in renal sodium, potassium, and chloride excretion after single and repeated doses of furosemide. The action of the drug on electrolyte excretion and on solute-free water clearance is related to its site of action in the proximal tubule and ascending limb of the countercurrent multiplier system. The therapeutic efficacy of furosemide in acute and chronic experiments is described. Clinical and biochemical abnormalities such as hyperglycemia and hyperuricemia which occur during long term furosemide therapy are presented and methods for their prevention and treatment are described.

The Diagnosis Of Pulmonary Embolization By Means Of Isotope Scanning

Sidney Ketyer, M.D., Stanley Marcus, M.D., Charles R. Ream, M.D., and Peter Poulos, M.D., St. Elizabeth Hospital, Elizabeth

Pulmonary scanning of patients injected with macroaggregated molecules of human serum albumin —I 131—has been done at St. Elizabeth Hospital for the past two years for diagnosing pulmonary embolization. The rationale, method, and ease of the examination will be described. Normal and abnormal studies will be shown in detail. This can be the earliest objective evidence of embolization even when the chest x-ray is negative. Other pulmonary pathology giving a positive scan will be shown.

The Spleen—New Concepts Of Its Function

Eric J. Lazaro, M.D., Albert H. Levy, M.D., Laurence P. Parmer, Ph.D., and Albert Schnerring, New Jersey College of Medicine and Denistry, and Veterans Administration Hospital, East Orange

This exhibit will outline present day knowledge about the role of the spleen in body function. It will illustrate the clinical entities associated with diseases of the spleen. Finally, the display will present the results of the action of certain splenic extracts on the cellular elements of the blood and discuss the significance of this action.

A Gynecologic And Obstetric Quiz

James L. Breen, M.D., Herik Caterini, M.D., Jahir Sama, M.D., and Caterina Gregori, M.D., Newark City Hospital, Newark

This exhibit will present transparencies dealing with various phases of pathology as encountered in obstetrics and gynecology. The display will serve as a quiz; appropriate histories will be presented in a pamphlet, with an area for diagnosis. They will be graded and announcements made of the diagnoses and the winners.

1967 Annual Meeting

TECHNICAL EXHIBITS

Monday and Tuesday, May 15 and 16
9:00 a.m. to 5:00 p.m.

Wednesday, May 17
9:00 a.m. to 12:00 noon

American Mutual Liability Insurance Co.

Mr. Joseph Britton, manager of the Professional Liability Insurance Department for New Jersey, will be pleased to answer any questions or discuss any problems relating to professional liability or professional premises liability coverages.

Astra Pharmaceutical Products, Inc.

Available is information and descriptive literature pertaining to Xylocaine® (lidocaine) and Citanest® (prilocaine) local and topical anesthetics, and iron preparations. Astrafer® (dextriferron) for intravenous use and Jectofer® (iron sorbitex) for intramuscular administration, will be available at the Astra booth presided over by our representative, Mr. Arnold G. Everson.

Ayerst Laboratories

Ayerst Laboratories extends an invitation to visit our exhibit where Mediatric® and Thiosulfil® are being featured. Our representatives will be pleased to discuss these or other Ayerst products with you. Descriptive literature will also be available.

Barrington Research Associates

Barrington Associates will conduct interviews concerning problems of mutual interest to the physician and the pharmaceutical industry.

Baby Service, Inc.

A warm welcome and a red rose await each visitor at the Baby Service booth. This hospitality for over ten years has made Baby Service a conversation piece at every meeting. The latest improvement in diaper service for home and hospital will be on display. Ask about our new layette service for hospitals.

E. & W. Blanksteen Agency, Inc.

E. & W. Blanksteen have been official insurance brokers for The Medical Society of New Jersey since 1933 for the administration of officially approved plans of disability, major medical, and life insurance. Information and literature, as well as personal consultation, are available at this booth.

The Borden Company

Borden, a pioneer in infant nutrition, introduces Neo-Mull-Soy for infants and children allergic to cows milk. Up to date data on Bremil, Mull-Soy, and Methakote are also available.

Burrough Wellcome Co. (U.S.A.) Inc.

Of particular interest at this meeting is Zyloprim® a brand of allopurinol which represents a totally new concept for the management of gout, uric acid nephropathy, calculi, and hyperuricemia due to neoplastic disease and/or its intensive treatment. Syloprim® was first synthesized in the Wellcome Research Laboratories in Tuckahoe, New York, and is the first drug to be marketed which reduces the formation of uric acid at its source.

Cameron-Miller Surgical Instruments Co.

The new compact Model 26-250 Electro Surgical Unit for office and clinic use will be exhibited for the first time. This 15 pound unit will outperform all existing electro surgical machines. In addition, a new set of instruments for the examination and diagnosis of pre-adolescent patients will be shown, as well as our standard excellent electrically illuminated diagnostic instruments. Doctors who have Cameron light can see as well as look.

Ciba Pharmaceutical Company

Ciba Professional Service Representatives will be pleased to discuss Ser-Ap-Es.®

The Coca-Cola Company

Ice cold Coca-Cola will be served through the courtesy and cooperation of the Coca-Cola Bottling Company of South Jersey, and The Coca-Cola Company.

Dome Laboratories

Dome Laboratories is a world leader in dermatologicals. They here feature dermatologic specialties of interest to the members of The Medical Society of New Jersey. Among the products to be presented are Uval,® the new ultra-violet sunscreen, and Scadan,® a simplified concept for the treatment of

seborrhea. Cort-Dome,® Nystaform HC,® and other steroid products will also be shown.

Eaton Laboratories

Since 1939, Eaton Laboratories have pioneered in the development of the nitrofurans, many of which have been available as legend drugs to the profession. Basic and clinical research is continuing on these as well as other classes of compounds. In addition, Eaton Laboratories offer a variety of research and educational services for all phases of medicine. Our Medical Service Representatives at the Eaton Booth welcome the opportunity to furnish you with complete information.

Thomas A. Edison Industries

Edison Voicewriter will show a complete line of business recording equipment designed to speed handling of medical paper work.

Edison Voicewriter executive models . . . for individual use by the doctor in his office and at home.

Edison Escort . . . battery-operated portable dictating instrument.

Televoice . . . phone network dictating systems for accurate, complete medical records in the hospital.

Edison Envoy . . . low-cost magnetic tape dictating and transcribing equipment.

Edison Message Recorder.

Encyclopaedia Britannica, Inc.

Encyclopaedia Britannica and its publications welcome members of The Medical Society of New Jersey and invite them to examine the new editions of Britannica. Official delegates may purchase this magnificent set at an offer only available at our convention exhibits. Visit Britannica for further information.

Endo Laboratories Inc.

Endo Laboratories will present the latest clinical information relating to our products, Coumadin® (sodium warfarin) Numorphan® (oxymorphone) HCL, Percodan®-Demi, Hycomine®, Hycomine®-Compound, Hycodan®, Percodan®, Valpin® (anisotropine methylbromide), Valpin®-PB (anisotropine methylbromide with phenobarbital).

Esta Medical Laboratories, Inc.

The Estaneedle Device provides a rapid, economical, painless method of screening a single patient or 450 per hour, for tuberculin testing, vaccinations and allergy testing. The variable, such as depth of puncture, amounts of materials injected and the subjective readings have almost been entirely eliminated, providing the physician with a much greater validity in the above mentioned procedures.

Marshall Erdman and Associates, Inc.

Marshall Erdman and Associates specialize in medical building planning and construction. More than 2,000 doctors (in 40 states) now practice in Erdman Buildings. Erdman's experienced specialists will plan and construct your building and assume total responsibility from the land planning stage through completion for occupancy. Their experience offers the busy physician the most efficient possible building at an economical guaranteed cost.

Geigy Pharmaceuticals

Geigy Pharmaceuticals cordially invites members and guests of the Society to visit its exhibit. The exhibit features important new therapeutic developments in the management of cardiovascular disease as well as current concepts in the control of inflammation; hypertension and edema; depression; obesity; and other disorders, which may be discussed with representatives in attendance.

Hoechst Pharmaceuticals, Inc.

Lasix (furosemide) is a new diuretic with a high degree of efficacy, rapid onset of action, comparatively short duration of action; acts not only in the proximal and distal tubule but also at the ascending limb of Henle's loop; low toxicity when properly used. It is indicated for the treatment of edema associated with congestive heart failure, cirrhosis of the liver, and renal disease, including the nephrotic syndrome.

Hospital Service Plan of New Jersey

Hospital Service Plan of New Jersey is the nation's pioneer Blue Cross Plan. It provides more than 2.9 million persons with the finest in prepaid hospital care protection. With 240 contracting hospitals in New Jersey and adjacent states, and a link of over 6,000 other hospitals across the nation through the unique Inter-Plan Service Benefit Bank, Blue Cross makes available comprehensive service benefits for subscribers and their dependents.

Kessler Associates, Inc.

Here, under one roof, a physician may obtain almost any type of paramedical equipment and rehabilitation aids. We fabricate (under medical prescription) upper and lower prosthetic appliances, braces, back braces, supports, hernia belts, and knee cages. In the rehabilitation areas, Orthotics, Inc., the associated firm, provides a full line of wheel chairs, crutches, walkers, pneumatic lifts, stair glides, hydro therapy machines, Sauna baths, exercise equipment and inhalation therapy service. With a thorough background of years of rehabilitation and certified prosthetists we are confident we can be an asset to the physician and his patients.

Knoll Pharmaceutical Company

Akineton® is for parkinson's and for drug-induced extrapyramidal disorders. Dilaudid® is for acute and chronic pain. Dilaudid® Cough Syrup is used for fatiguing non-productive cough. Metrazol®, Vita-Metrazol®, and Nico-Metrazol® are for geriatric patients, for the relief of symptoms of senility, and for apathy and chronic fatigue. Quadrinal® and Verequad® are helpful in bronchospasm and wheezing. Here and now, Knoll introduces its new bronchodilator/expectorant, Theokin® Elixir, for the symptomatic treatment of bronchial asthma, chronc bronchitis, and pulmonary emphysema.

Lamond Products, Inc.

Lamond Dermatological Laboratories will introduce our newest product, Bur-Zin® (burows emulsion). This is a modified-burows emulsion without lanolin. It is a companion product to Bur-Zin® emulsion which has been extremely well accepted in dermatologic practice as well as in other medical specialties. Lamond Products will be glad to discuss such popular products as Aquol® bath oil, the two Bur-Zin® emulsions, Bur-Cort®, Bentical® shake lotion, Dermasul®, Dermasorcin®, Dermastringe®, Sebana® shampoo, Sebantar® shampoo, Lamotane®, and Sunprotectol®.

Lederle Laboratories

Lederle Laboratories is proud to support the 201st Annual Meeting of The Medical Society of New Jersey. As one of the leaders in medical research and quality controlled production, we present for your consideration products such as Declomycin®, Achromycin® V, Aristocort®, Levoprome®, and others applicable to your practice. Our representatives are also prepared to provide information on our numerous services to medicine.

David and Charles Levinson

David and Charles Levinson, Medical Specialties, display the famous Medcolator and the unique Medco-Sonlator; synchronized sound and stimulation with the Trigger Point Locator. Also on display will be the Achilleometer, thyroid test of extreme accuracy. Two new products are the Medco-Therm; moist heat and cycling massage and the Minalator. This is a transistorized Medcolator with new "Rippled" galvanic current, pocket sized.

Eli Lilly and Company

You are cordially invited to visit the Lilly exhibit. Our sales representatives in attendance will welcome your questions about Lilly products. You may be particularly interested in discussing Keflin® sodium cephalothin.

McNeil Laboratories, Incorporated

Members of the Society are cordially invited to visit our booth where products to be featured include Butisol Sodium® (sodium butabarbital), Tylenol® (acetaminophen) and Parafon Forte®.

Mead Johnson Laboratories

The Mead Johnson Laboratories' exhibit has been arranged to give you the optimum in quick service and product information. To make your visit productive, specially trained representatives will be on duty to tell you about their products.

Medical-Surgical Plan of New Jersey

Physician-Relations representatives will be available at the Medical-Surgical Plan booth to discuss with physicians any suggestions or questions they may have about the Plan. Particular interest in 1967 will center on New Jersey Blue Shield coverage complementing Medicare and the Plan's studies relative to a prevailing fee payment concept.

Medi-Kal Physicians and Hospital Supply Co.

Medi-Kal will show the latest in Modular medical examination room furniture and a variety of power operated and hydraulic examination room tables. They will also show for the first time, the brand new EK 4 Burdick Electrocardiograph.

Merck Sharp & Dohme

The Merck Sharp & Dohme exhibit has been designed to offer a serious contribution to your therapeutic armamentarium. Technically trained personnel are available to discuss the scope and variety of services offered to phyiscians.

Milex Products, Inc.

Latest technics in pelvic cancer detection, office, and operative gynecology will be shown. A complete series of patient level sex education is on display. Sample copies are available on your request. Our attendants will explain Amino-cerv® specific for cervical therapy, and Trimo-San® non-specific for vulvo vaginitis will be discussed.

New Jersey Bell Telephone Company

Summary not received

Organon Inc.

The Organon booth features a new line of diagnostics, each in a complete "laboratory in a box," designed for aiding in fast, accurate diagnosing of pregnancy, rheumatoid arthritis and infectious mononucleosis. MONOSTICON uses fingertip blood and is a differential test for the presence of the infectious mononucleosis heterophile antibody in two minutes. RHEUMANOSTICON is a one-minute test for the presence of rheumatoid factor in fingertip blood, whose selective sensitivity makes it most accurate for rheumatoid arthritis. PREGNOSTICON SLIDE TEST is a two minute screening test for pregnancy, measuring HCG levels in urine. Your assistant can perform the tests with less than a half-hour's training. COTAZYM (pancrelipase), the superior pancreatic digestive enzyme product, is also featured.

Ortho Pharmaceutical Corporation

Ortho is proud to present the most complete line of medically accepted products for the control of conception. Of special note are the three latest products of the Ortho Research Foundation: Ortho-Novum® 2mg Tablets, Ortho-Novum SQ® Tablets, and Delfen® Cream and Foam. Also on display will be our well-known products for treatment of various forms of vaginitis. Your questions will be welcomed by representatives in attendance.

P. R. O., Incorporated

P.R.O., Incorporated specializes in administering an Internal Revenue approved Trusteed Keogh Retirement Plan. This plan, using Standard & Poor's Corporation as the investment adviser, has been formally adopted by over 70 professional groups. Hundreds of individuals are using this unique program to obtain their Keogh tax shelter and income tax deductions.

Parke, Davis & Company

Summary not received

Pfizer Laboratories

The Pfizer Laboratories' display has been specifically arranged for your convenience and to give you the maximum in quick service and product information. To make your visit worthwhile, technically trained medical service representatives will be on hand to discuss with you the latest developments in Pfizer research.

The Purdue Frederick Company

Betadine® Products contain povidone-iodine N.F., a unique complexing of elemental iodine with polyvinylpyrrolidone. This retains a broad microbicidal iodine spectrum, yet it is virtually nonirritating, and longer-acting. It is nonstaining to skin and natural fabrics. It kills iodine-susceptible bacteria, fungi, protozoa, viruses, and yeasts. Senokot® products will also be featured.

A. H. Robins Company, Inc.

You are cordially invited to visit the Robins display and meet our representatives who will welcome the opportunity to discuss products of interest with you.

Roche Laboratories

Continuing Roche research has produced outstanding contributions to medicine since 1909. The personnel at the exhibit welcome your comments, questions, or suggestions about our products and services.

Sandoz Pharmaceuticals

Summary not received

W. B. Saunders Company

Saunders will have on display a complete line of medical books, including many new titles such as: the new edition of Beeson and McDermott, **Textbook of Medicine;** Conn, **1967 Current Therapy; Pharmacology for Physicians;** Frieboes-Schonfeld, **Dermatology;** and many others.

Schering Corporation

Schering Corporation invites you to visit its exhibit where representatives will be available to discuss with you any question you may have on Etrafon®, Garamycin®, Celestone®, Soluspan®, Alfrin®, Tinactin®, or any other Schering product.

G. D. Searle & Company

You are cordially invited to visit the Searle booth where our representatives will be happy to answer any questions regarding Searle Products of Research. Featured will be Ovulen® for ovulation control and menstrual disturbances, and Flagyl®, a potent, new trichomonacidal agent for trichomonal vaginitis, cervicitis, urethritis and prostatitis.

Smith Kline & French Laboratories

Featured will be our comprehensive oral diuretic Dyazide®, each capsule containing 50 mg. of Dyrenium® (brand of triameterene) and 25 mg. of hydrochlorothiazide.

E. R. Squibb & Sons

E. R. Squibb & Sons has long been a leader in development of new therapeutic agents for prevention and treatment of disease. The results of our diligent research are available to the medical profession in new products or improvements in products already marketed. We will be pleased to present up-to-date information on these advances for your consideration.

Stiefel Laboratories

BENOXYL, the new chemexfoliative for the treatment of acne, will be available for your evaluation at Stiefel display. The Brasivol and Acne-Aid family of products will also be featured.

ICHTHO-CORT CREAM and OINTMENT offer many advantages in the treatment of the eczemas. Talk to our representative about the latest developments in this field.

ZeaSORB is the super-absorbent medicated powder with Stiefel's exclusive microporous corn-cob cellulose derivative.

Please do stop at Stiefel's display.

Syntex Laboratories, Inc.

Synalar® (fluocinolone acetonide), the topical corticosteroid designed to meet specific dermatologic needs, will be featured. Synalar® has set a new standard of success in the treatment of a wide range of inflammatory dermatoses. Norinyl® (norethindrone 2.0 mg. with mestranol 0.1 mg.) Tablets, an original steroid from Syntex Laboratories, will be featured. Norinyl® provides multiple contraceptive action that has produced a record of 100 per cent effectiveness.

Systemedics, Inc.

You can check the increasing cost of manual or semi-automated systems used for monthly billing, tracking of delinquencies, and preparation of insurance forms by combining all your record keeping into a one-entry journal. From this information, Systemedics will prepare detailed, personalized statements for your patients, and provide the practice with an alphabetical listing of active accounts showing charges, dates, and delinquency status, etc. Each month you are provided with other data pertinent to the control and growth development of your practice.

Technicon Instruments Corporation

Summary not received

C. O. Truxton, Inc.

This exhibit consists of a number of multi-layered tablets and time disintegrating products that will be found useful to the modern physician, as effective addenda to his armamentarium. These products are designed for pain syndromes, symptomatic relief of colds and allergies, and for the management of obesity, all of which will be helpful to the physician for his use in dispensing or prescribing.

U. S. Vitamin and Pharmaceutical Corp.

The U. S. Vitamin & Pharmaceutical Corporation cordially invites you to visit its exhibit where ARLIDIN will be on display.

Professional service representatives will be in attendance to welcome you and to be of help in answering inquiries pertaining to the products on display, as well as any of their other products.

Unimed, Inc.

We look forward to the opportunity of discussing with you our new molecule Serc® (betahistine hydrochloride)—as an aid for reducing the frequency of episodes in vertigo associated with Meniere's syndrome in those patients with a high frequency of vertiginous episodes.

The Upjohn Company

Professional representatives of The Upjohn Company are eager to contribute to the success of your meeting. We are here to discuss with you products of Upjohn research that are designed to assist you in the practice of your profession. We solicit your inquiries and comments.

Warren-Teed Pharmaceuticals Inc.

You are cordially invited to visit the Warren-Teed exhibit. Featured products will be Modane®, a nutritional deconstipant for rehabilitation and relief of the atonic bowel, and Kaon®, potassium therapy well tolerated and rapidly absorbed in GI tract (potassium gluconate in tablets and palatable elixir).

Winthrop Laboratories

You are cordially invited to visit the Winthrop Laboratories booth where you will see displays of Wingel®, antacid liquid and tablets (hexitol-stabilized aluminum and magnesium hydroxides). This neutralizes 300 times its weight in gastric acid for fast and prolonged relief. Also shown are Leuprel®, a brand of isoproterenol, Mistometer®, and NeGram®, a brand of nalidixic acid.

Wynn Pharmaceuticals, Inc.

QUINAGLUTE® DURA-TABS®, quinidine gluconate tablets for maintenance of normal sinus rhythm with convenient, well-tolerated q. 8 h. or q. 12 h. dosage.

AMINOPHYLLINE DURA-TABS®, 4½ grains, prolonged action, well tolerated.

NUMA® DURA-TABS®, an improved, prolonged-action formula for the relief of chronic bronchial asthma.

HISTADUR® DURA-TABS®, chlorpheniramine maleate in a prolonged action formula for relief of hay fever and other allergic disorders.

40th ANNUAL MEETING

Woman's Auxiliary to The Medical Society of New Jersey

Saturday through Tuesday
May 13, 14, 15, 16, 1967

Chalfonte-Haddon Hall
Atlantic City

Schedule of Events

Saturday, May 13, 1967

1:00 p.m. to 5:30 p.m.—Registration for Art Show
(Lobby floor, Haddon Hall)

*2:00 p.m.—Golden Merit Award Ceremony
(Rutland Room, First floor, Haddon Hall)

Sunday, May 14, 1967

9:30 a.m. to 4:30 p.m.—Registration
(Lobby floor, Haddon Hall)

10:00 a.m. to 4:30 p.m.—Sale of Tickets
(Lobby floor, Haddon Hall) for President's Luncheon—Monday
(Carolina Room, Chalfonte Hotel)
All doctors' wives invited

10:00 a.m.—Art Exhibit
—County Press and Publicity Books Exhibit
—County Activities Pictorial Display
(Lobby floor, Haddon Hall)

11:00 a.m.—Pre-convention Board Meeting
(Roberts Room, Office floor, Chalfonte)

12:30 p.m.—Fellowettes' Luncheon
(Blue Room, Office floor, Chalfonte)

3:00 p.m.—Tea and Fashion Show
(Rutland Room, First floor, Haddon Hall)

*5:30 p.m.—Reception for President-elect Collins
(Pennsylvania Room, Haddon Hall)

Monday, May 15, 1967

8:15 a.m. to 9:00 a.m.—Coffee and buns will be served
(Hallway, 13th floor, Haddon Hall)

8:15 a.m. to 4:30 p.m.—Registration
(Lobby floor, Haddon Hall)

9:00 a.m. to 12 noon—Tickets on sale
(Lobby floor, Haddon Hall) for President's Luncheon—Monday
(Carolina Room, Chalfonte Hotel)

9:00 a.m. to 12 noon—General Session
(West Room, 13th floor, Haddon Hall)

10:00 a.m. to 4:30 p.m.—Sale of Dinner-Dance tickets

12:30 p.m.—Annual President's Luncheon
Carolina Room, Lounge floor, Chalfonte Hotel)

2:30 p.m.—General Session reconvenes

*7:00 p.m.—Dinner-Dance
(Pennsylvania Room)

Tuesday, May 16, 1967

8:00 a.m.—Breakfast for new county presidents
(Mandarin Room, 13th floor, Haddon Hall)

9:00 a.m. to 10:00 a.m.—Coffee and buns will be served
(Hallway, Tower floor, Haddon Hall)

9:00 a.m. to 10:00 a.m.—Registration
(Lobby floor, Haddon Hall)

10:00 a.m.—Post-convention Board Meeting
(West Room, 13th floor, Haddon Hall)

Convention Committee

Chairman—Mrs. Samuel J. Kaman

Co-Chairman—Mrs. Hugh Kearney

* MSNJ events to which the Auxiliary Members are cordially invited.

STATE ACTIVITIES

Trustees' Meeting

February 19, 1967

A regular meeting of the Board of Trustees was held on February 19, 1967. For your further information, detailed minutes are on file with the Secretary of your component society. A summary of the significant actions follows:

Public Hearing on MSP Rate Increase . . . Commended those responsible for the statement which recorded MSNJ's support of the application for MSP rate increases. This was presented at the public hearing called by the Commissioner last month.

. . . Directed that the full statement be included in the next issue of the *Membership Newsletter.*

Consultants from Specialty Societies . . . Referred to the Council on Medical Services the request for consultants to the Council from specialty societies which manifest certain concerns or have specific points to press.

AMA Conference on Emergency Medical Services . . . Authorized the attendance of Dr. John F. Kustrup of Trenton at the AMA Conference on Emergency Medical Services to be held in Chicago on April 6 and 7, 1967.

Joint Program on Cancer . . . Agreed to cosponsor with the New Jersey Public Health Association, the New Jersey Division of the American Cancer Society, and Rutgers University a joint program on cancer.

Annual Meeting . . . Approved a program to be presented by the Prudential Insurance Company and the Social Security Administration at the Annual Meeting *General Session on Medicare.*

. . . Agreed that the 1967 *Annual Dinner-Dance* should honor the President of MSNJ, and that it should be under the auspices of the Woman's Auxiliary.

United States Savings Bond Program . . . Approved the request from the United States Treasury Department that MSNJ cooperate in a Savings Bond Program to the extent that MSNJ send leaflets to each of the component county societies, with a covering letter suggesting that one meeting during the year (on a local level) be devoted to this program.

Privileged Communication for Physicians . . . Approved, upon recommendation of the Council on Legislation (in accordance with the direction of the Board of Trustees on October 16, 1966), the following proposed amendment to Section 28 of the "Practicing Psychology Licensing Act" (Public Law 1966, chapter 282), and directed that it be introduced at the earliest possible time:

AN ACT amending Section 28 of the "Practicing Psychology Licensing Act" approved September 12, 1966 (P.L. 1966, c. 282)

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. Section 28 of Chapter 282 of the Laws of 1966 is amended to read as follows:

28. The confidential relations and communications between a licensed practicing psychologist and the individuals with whom he engages in the practice of psychology *and a fully licensed physician and his patients* are placed on the same basis as those provided between attorney and client, and nothing in this act shall be construed to require any such privileged communications to be disclosed.

2. This act shall take effect immediately.

Current State Legislation† . . . Adopted the positions recommended by the Council on Legislation, as indicated on the following bills:

S-15 —To require all milk tops to have the days of
A-157—the week the milk was pasteurized fully spelled out or abbreviated in no less than three first letters. *NO ACTION*

†All bills thus marked (*) are identical with measures of last year — or preceding years — whose official positions were the same.

S-19 —To create the Division of Postmortem Examiners in the State Department of Health. *ACTION DEFERRED . . .* pending introduction of an Administration-sponsored bill dealing with the same subject.

S-29 —To exempt from the "Sales and Use Tax Act" all medicines and physical corrective devices, soaps, detergents, and household products. *APPROVED*

S-30 —To exempt from the "Sales and Use Tax Act" artificial devices designed to alleviate physical incapacity. *APPROVED*

*S-39 —To provide for increases in maximum benefits
*A-1 —for permanent partial disabilities; increases in funeral allowances; free choice of physician; a Board of Workmen's Compensation Appeals; and other changes. *NO ACTION*

S-55 —To exempt from the "Sales and Use Tax Act" sales of over-the-counter drugs and certain physical corrective devices. *APPROVED*

S-57 —To provide that Sections 1 and 2 of Chapter 170, Title 2A (concerning drugs), shall not apply to licensed medical practitioners acting in the regular course of their business or profession. *ACTION DEFERRED . . .* pending further study and investigation.

*S-73 —To prohibit the discharge of pollutant matter or materials into inland tidal waters and to regulate the operation of toilet facilities in vessels in said waters. *APPROVED*

*S-79 —To eliminate the need for a physician's certificate in connection with an absentee ballot for temporary disability. *DISAPPROVED,* because it would encourage self-diagnosis.

*S-81 —To forbid hypnotizing as a form of entertainment. *APPROVED*

S-84 —To provide that municipalities may promul-
A-227—gate air pollution ordinances and regulations when necessary for their localities, which shall not be in conflict with — but may be more restrictive than — state law. *NO ACTION*

*S-123—To provide for education of students in the
*A-280—professions of medicine and dentistry. *APPROVED*

*S-146—To provide for the disposition of human remains and parts thereof by written instrument signed by the donor and two witnesses. *APPROVED*

S-148—To prohibit littering of waterways and adjacent shores and beaches and to regulate marine toilets. *APPROVED*

S-150—To exempt from the "Sales and Use Tax Act" any services rendered with respect to personal property exempt from taxation; over-the-counter drugs; artificial apppliances which alleviate physical incapacity; soaps, detergents, household paper, and plastic products; pet foods; sales of the American flag; and to consider non-profit volunteer fire companies, first aid, ambulance rescue, and emergency squads as exempt organizations. *APPROVED*

S-154—To provide for reimbursement for any optometric service under health and sickness insurance policies whether said service is performed by a physician or a duly licensed optometrist. *DISAPPROVED* as unnecessary, since the optometrist is already entitled to payment for services rendered under any insurance policy which provides for optometric services.

S-155—To provide that benefits of medical service corporations shall not be denied eligible individuals for eligible services performed by a duly licensed optometrist. *ACTIVE OPPOSITION* (post-facto 1.26.67), because the services which optometrists are licensed to provide are not among the services covered by Medical Service Corporations.

S-156—To provide for reimbursement for any optometric service under group accident, group health, and group accident and health insurance policies whether said service is performed by a physician or duly licensed optometrist. *DISAPPROVED* as unnecessary, since the optometrist is already entitled to payment for services rendered under any insurance policy which provides for optometric services.

*S-157—To provide for the licensing and registration of electrologists by the Board of Medical Examiners. *APPROVED*

S-159—To exempt from the "Sales and Use Tax Act"
A-407—sales and admission charges made in connection with fund raising events conducted by non-profit associations or corporations where proceeds are used for charitable purposes and to consider as an exempt organization one which conducts affairs for the purpose of raising funds for its authorized purposes. *APPROVED*

S-160—To exempt from property taxation any facility used primarily for preventing or abating water pollution. *APPROVED*

S-180—To increase the penalty for violation of the Air Pollution Control Act to $25,000, each day a separate offense; and to rebate up to 90% of such penalty where the violation has been eliminated within one year. *NO ACTION*

*S-194—To require every board of education to employ an optometrist or ophthalmologist. *ACTIVE OPPOSITION,* because the school physician already has the obligation to screen for physical defects, including impairment of vision. The addition of an optometrist or ophthalmologist would, in consequence, be an unjustifiable and expensive redundancy.

*S-209—To include under the scope of laws dealing with the practice of optometry any who offer and market for sale at retail to the general public spectacles or eyeglasses containing other than plano lenses. *DISAPPROVED* as unnecessary, because the vending of such glasses is not proper or exclusive to the practice of optometry, whose fundamental function (under law) is to examine for defects of vision and to prescribe corrective lens. This legislation would deny to the public access to low-cost eyeglasses of simple magnification, and thus is restrictive of free choice and is discriminatory.

*S-210—To include in the practice of optometry any person who prescribes or dispenses to the general public spectacles or eyeglasses containing other than plano lenses. *DISAPPROVED* as unnecessary, because the vending of such glasses is not proper or exclusive to the practice of optometry, whose fundamental function (under law) is to examine for defects of vision and to prescribe corrective lens. This legislation would deny to the public access to low-cost eyeglasses of simple magnification and thus is restrictive of free choice and is discriminatory.

*S-213—To provide that any person who practices ophthalmic dispensing in violation of the act governing regulation of the practice shall be liable to a penalty of not more than $200. *DISAPPROVED,* because it would deny to the public access to low-cost eyeglasses of simple magnification and thus is restrictive of free choice and is discriminatory.

*S-214—To direct the Department of Institutions and
*A-455—Agencies to determine a program and plan for medical assistance for the needy in accordance with social security programs providing old age assistance, aid to the blind, aid to dependent children, and aid to the disabled. *APPROVED*

*S-215—To correct several technical errors in the
*A-166—mental retardation act. *APPROVED*

S-251—To permit a municipality to purchase, take by gift or through condemnation, any interest in real property for sale or conveyance to a state-operated college of medicine or college of medicine or dentistry and to establish a procedure therefore. *NO ACTION*

S-253—To provide for the construction, administration, and supervision of a Neuropsychiatric Institute in the Department of Institutions and Agencies by Rutgers, The State University. *NO ACTION*

*S-271—To require every district and regional board of education to appoint an advisory committee on narcotics to aid and advise the board of measures needed to prevent trafficking in, improper use of, and addiction to narrcotics within the high school. *NO ACTION*

S-288—To provide for state inspection of motorcycles and to authorize the Director of Motor Vehicles to prescribe certain safety equipment. *APPROVED*

S-292—To authorize local units, including a city, to acquire land for use of a college of the New Jersey College of Medicine and Dentistry; to incur indebtedness and to issue negotiable bonds for such purposes. *NO ACTION*

S-307—To permit the Board of Medical Examiners to grant a license for the practice of medicine and surgery without further examination where an applicant shows he has been examined and licensed in a foreign country. *DISAPPROVED,* because it would circumvent the orderly and dependable procedure for licensing of physicians adopted by the State of New Jersey as a means of protecting the public against unqualified practitioners. It would impose upon the State Board of Medical Examiners the almost impossible responsibility of ascertaining the standards of licensure applied in all foreign countries, and of deciding whether those standards may be accepted as equivalent to those which New Jersey imposes, or to those of other states whose licensees New Jersey accepts on a basis of reciprocity.

S-312—To provide that the services of a chiropractor shall be considered as medical and surgical services under the Workmen's Compensation Act, health and accident, disability, sickness or other insurance policy, or labor-management trustee; union welfare and other plans and insurances. *DISAPPROVED, WITH ACTIVE OPPOSITION IF BILLS MOVES,* because chiropractors receive a limited license to practice chiropractic. They are not licensed or recognized as physicians or surgeons and are not qualified — or licensed — to supply medical and/or surgical services for injuries and/or disease conditions.

S-313—To provide for reimbursement for chiropractor services under any group accident and/or health insurance policy or contract. *DISAPPROVED,* as unnecessary, since the chiropractor is already entitled to payment for services rendered under any insurance policy which covers chiropractic services.

S-314—To provide that the practice of chiropractic shall be covered under the provisions governing Medical Service Corporations. *DISAPPROVED, WITH ACTIVE OPPOSITION IF BILL MOVES,* because the services which chiropractors are licensed to provide are not among the services covered by Medical Service Corporations. They are not licensed or recognized as physicians or surgeons and are not qualified — or licensed — to supply medical and/or surgical services for injuries and/or disease conditions.

S-315—To provide for reimbursement for chiropractor services under any policy of accident and sickness insurance. *DISAPPROVED* as unnecessary, since the chiropractor is already entitled to payment for services rendered by him under any insurance policy which covers chiropractic services.

*S-333—To provide that any resulting disease of the respiratory system of a member of a paid fire or police department shall be deemed an occupational disease. *DISAPPROVED,* because it involves diagnosis by legislative enactment rather than by medical investigation.

*S-334—To amend Chapter 253, P.L. 1944, providing for retirement of firemen or policemen; provides that diseases of the respiratory system shall be presumed to be injuries received in the performance of duty. *DISAPPROVED,* because it involves diagnosis by legislative enactment rather than by medical investigation.

*S-335—To amend Chapter 255, P.L. 1944, providing for retirement of firemen and policemen; provides that diseases of the respiratory system shall be presumed to be injuries received in the performance of duty. *DISAPPROVED,* because it involves diagnosis by legislative enactment rather than by medical investigation.

S-345—To abolish the Air Pollution Control Commission and to transfer its functions to the Department of Health and to create a Clean Air Council of 15 members. *APPROVED*

S-346—To appropriate $1,500,000 to acquire and/or improve property in the South Jersey area to constitute a South Jersey branch of the New Jersey College of Medicine and Dentistry. *ACTION DEFERRED,* pending study and investigation.

*A-2 —To increase weekly maximum unemployment compensation and temporary disability benefits to ⅔ of average weekly wages of employees covered by the Unemployment Compensation Law; to increase total maximum benefits to ⅓ of base year wages; to provide strike benefits and other changes. *NO ACTION*

A-5 —To provide for examination of medical service corporation plans of payments by the Commissioner of Banking and Insurance upon filing of a petition signed by 50 or more interested persons. *DISAPPROVED WITH ACTIVE OPPOSITION IF BILL MOVES,* because it would empower the Commissioner of Banking and Insurance to fix fees to be paid by MSP to participating physicians and would, therefore, constitute an unwarranted and unjustifiable denial of the fundamental right of the physician himself to declare — or by his own choice to authorize an agency to set — his fees for professional services rendered. Thus, it would threaten the operation of the Plan by discouraging the adherence of participating physicians and it would be in disregard of the best interests of the approximately 2,700,000 people of New Jersey who are its beneficiaries.

A-6 —To require the Commissioner of Banking and Insurance to conduct a complete examination of hospital service corporations and hospitals with whom contracted before approving schedules of rates to be paid by subscribers. *DISAPPROVED,* because—although MSNJ approves the recommendation of the Governor's Commission to Investigate Blue Cross that an audit under official auspices should be established and maintained — the Society is convinced that such audit should not be limited to the time of application for a subscription rate increase.

*A-12 —To establish presumptions in certain illnesses of firemen and policemen. *DISAPPROVED,* because it involves diagnosis by legislative enactment rather than by medical investigation.

*A-13 —To provide that any condition or impairment of health to a uniformed member of a paid fire department caused by hypertension, heart disease, or tuberculosis shall be deemed to be an occupational disease. *DISAPPROVED,* because it involves diagnosis by legislative enactment rather than by medical investigation.

*A-35 —To define legal insanity as a defense to all crimes and to provide for commitment of the mentally ill. *NO ACTION*

*A-81 —To reorganize and continue an eleven-member Air Pollution Control Commission in the State Department of Health. *NO ACTION* (in view of approval of S-345).

A-105—To provide that the Civil Service Commission may refuse to examine or certify as eligible any applicant who is mentally or emotionally disabled. *NO ACTION*

*A-106—To repeal the law granting immunity to nonprofit charitable institutions from actions for damages for injury to persons. *DISAPPROVED,* because the Society supported S-204 of 1958, which created the law A-106 seeks to repeal.

*A-170—To prohibit commitment of sex offenders to mental institutions other than those providing entirely separate facilities. *APPROVED*

*A-176—To require fingerprinting and photographing of persons arrested for any offense relating to dangerous drugs. *APPROVED*

*A-189—To increase the state scholarship to $600 in place of $500 per year. *APPROVED*

A-195—To include carbon tetrachloride in the phrase defining "glue." *APPROVED*

*A-199—To prohibit subrogation of hospital and medical service of any insurance company for any hospital or medical services. *DISAPPROVED,* in support of the position of Medical-Surgical Plan of New Jersey and the recommendation of the Dumont Commission.

A-228—To provide for an "Air Pollution Emergency Control Act." *NO ACTION*

A-229—To provide there shall be no presumption that a driver's liability to operate a motor vehicle is impaired if there is in excess of 0.05% but less than 0.10% by weight of alcohol in the defendant's blood. *APPROVED*

A-230—To require all municipalities to acquire a suitable device for measuring the amount of alcohol in a person's blood by taking a sample of his breath and to have at least one qualified officer capable of operating such device. *APPROVED*

A-237—To provide for exemption under the "Sales and Use Tax Act" certain restaurant food, all medicine and drugs for human consumption, sewer service, and soaps and detergents, paper towels, napkins, and tissues. *APPROVED*

A-254—To require protective helmets for motorcycle operators and passengers. *APPROVED*

*A-266—To expand the "Good Samaritan Act" to include all persons who extend emergency aid. *DISAPPROVED,* because it would expose victims of accidents to serious danger in consequence of well-meant but incompetent ministrations that could do more harm than good.

A-292—To provide for physical fitness re-examination of motor vehicle licensees at least once every three years. *ACTION DEFERRED,* pending study and recommendation by the Special Committee on Traffic Safety.

A-293—To require motorcycles and motorcycle drivers to be equipped with certain equipment and to prescribe for supervision of learner-drivers of automobiles and motorcycles and to provide for inspection of motorcycles. *APPROVED*

*A-321—To require every employer of 75 or more employees to provide adequate medical care or attention for all injuries arising out of, and in the course of, such employment; to require a registered nurse on the premises of employers employing less than 200 employees; and where 200 or more are employed, to require the presence of a duly licensed physician at all times such employment is in operation. *DISAPPROVED,* because — although the declared purposes of the bill are commendable — the stipulated requirements are impossible of fulfillment in view of the limited number of nurses and practitioners in New Jersey.

A-334—To provide for suspension, revocation, or prohibition of motor vehicle licenses for persons convicted under the uniform narcotic drug law. *NO ACTION*

*A-335—To provide immunity from civil damage suits to volunteer first-aid or rescue squad workers who are not members of a volunteer fire company. *APPROVED*

*A-346—To transfer certain approval powers over hospital service corporations from the Commissioner of Institutions and Agencies to the Commissioner of Banking and Insurance. *NO ACTION*

*A-362—To include the crimes of "incest" and "private lewdness" within the category of those offenses which require examination of the individual at the Diagnostic Center. *APPROVED*

*A-369—To permit recovery of hospital, medical, and funeral expenses incurred for one wrongfully killed. *NO ACTION*

*A-389—To provide for a program for control of depressant and stimulant drugs and the commitment and treatment of drug addicts by establishing a State Narcotic Control Commission in the executive department of state government. *DISAPPROVED,* because of substantial and technical defects in the bill and because MSNJ supports the position of the Narcotic Drug Study Commission of the New Jersey Legislature that recently enacted legislation should be given adequate time to prove whether or not it is satisfactory.

A-394—To hold as a disorderly person one who possesses or sells any instrument or medicine designed to cause unlawful abortion. *DISAPPROVED,* because, although MSNJ approves the first stipulation to protect against the selling of instruments to cause unlawful abortion, this measure would invest authorized pharmacies or drug stores with the exclusive right to sell or distribute "any instrument, medicine, or other thing for the prevention of conception," in disregard of the licensed physicians' proper rights and responsibilities.

A-410—To establish the "State Uniform Dog Control and Licensing Act of 1967." *DISAPPROVED,* because of its many undersirable provisions, but chiefly because it would unjustifiably transfer a basic public health program — the prevention of rabies in humans and animals — and its supporting funds, from the Department of Health, which has long been administering the program with eminent success, to the Department of Agriculture. While disapproving A-410, the Society approves A-686 as sounder and more desirable legislation in this area of public concern.

*A-422—To prohibit persons from placing, turning or draining, or placing where it can run, flow, wash, or be emptied into the Delaware River above or below Trenton Falls, any explosive, deleterious, or poisonous substances. *APPROVED*

*A-424—To prohibit persons from placing, turning or draining, or placing where it can run, flow, wash, or be emptied into any of the fresh tidal waters within the state, any deleterious or poisonous substances of any kind. *APPROVED*

A-427—To hold as a disorderly person one who detains or impounds any stray cat or dog with intention to sell such animal for experimentation. *DISAPPROVED,* because MSNJ supports A-686, which it considers to be a superior measure.

A-459—To provide for physical and mental examination of students expelled from a public school for more than seven days. *DISAPPROVED* as impractical and unnecessary, since provision is already made for routine examinations in schools.

A-480—To provide that boards of education may require immunization against measles as a prerequisite to school attendance. *APPROVED*

A-487—To authorize a municipality to contract to provide health services to any non-profit private school. *APPROVED*

A-559—To prohibit sale or distribution of any egg products for human consumption unless such products have been pasteurized. *NO ACTION*

A-600—To expand mental health services. *ACTION DEFERRED,* pending study and investigation.

A-607—To provide that information to the State Board of Medical Examiners by applicants for examination shall include a declared intention to become a citizen of the United States. *ACTION DEFERRED,* pending study and report by the special committee of the Board of Trustees.

The Council was unanmious in its agreement that this is desirable legislation.

A-665—To authorize the Air Pollution Control Commission to prohibit, restrict, or condition — permanently or for a specified period — any activity whose contribution to air pollution would be a health or safety risk. *NO ACTION*

A-666—To authorize a governing body to prescribe penalties for violation of air pollution control ordinances, but not in excess of those prescribed in Chapter 212, Laws of 1954, Section 19. *ACTION DEFERRED,* pending study and investigation.

A-677—To create a clean water council of 17 members in the State Department of Health. *ACTION DEFERRED,* pending study and investigation.

A-686—To provide for permanent registration markings on dogs, transportation of animals, maintenance fees for seized and detained dogs; and to provide for release of unlicensed dogs to individuals or authorized institutions conducting experiments. *APPROVED*

Pharmacists' Substitution of Proprietary Drugs for Generic Drugs . . . Directed that the comments of Legal Counsel (supported by the Board of Trustees, as are the conclusions of the Morris County Medical Society that there was no merit in the complaint against the Morris County pharmacist) that if a generic preparation is prescribed by a physician, it is legally permissible for a pharmacist to substitute a proprietary drug, be directed to the Morris County Medical Society for its information. This action is the result of a request at the January 15, 1967 meeting of the Board for information concerning a reportedly recent decision in New Jersey sustaining the right of a prescription pharmacist to substitute a proprietary drug for a generic drug called for in a doctor's prescription.

AMA Congress on Environmental Health Management . . . Designated Dr. John J. Bedrick of Bayonne and Dr. John P. Coughlin of Jersey City to attend the AMA Congress on Environmental Health Management to be held April 24 to 26, 1967 at the Americana Hotel in New York City.

Mandatory Consultations by Physicians . . . Directed that the following information be supplied to the member-physician from Atlantic County who made inquiry concerning mandatory consultations by physicians who practice as partners or as a group: (This is in accordance with action of the Board on December 18, 1966 directing that a special committee contact the Joint Commission on Accreditation of Hospitals to ascertain whether the policy of MSNJ is at variance with that of the Joint Commission.)

The official attitude of the Commission is that, while it frowns on members of a partnership called in as consultants, the best man available should be called in consultation who is well qualified in the field in which his opinion is sought. The status of the consultant is determined by the medical staff on the basis of an individual's training, experience, and competence. The Commission recognizes that there are occasions when the best man available may be the partner. For this reason, the Commission does not feel that this requirement should be mandatory.

The Board unanimously concluded with the special committee that nothing in MSNJ's policy decision or in the declaration of the Joint Commission makes it impossible for a physician to serve as consultant to his associate *when no other consultant is available.*

Consultants to Radiation Protection Commission . . . Designated Dr. John J. Thompson of Montclair and Dr. Frank Schell of Paterson to serve in permanent status as consultants to the Radiation Protection Commission.

Institutes for X-ray Technicians . . . Agreed to co-sponsor—with the Academy of Medicine of New Jersey, the New Jersey Hospital Association, the New Jersey Association of Osteopathic Physicians and Surgeons, the New Jersey Society of Radiologic Technologists, the Radiological Society of New Jersey, and the New Jersey Commission on Radiation Protection — two one-day institutes for x-ray technicians. One institute will be held in northern New Jersey on either April 22 or 30 and another in southern New Jersey on April 29. These institutes will cover not only x-ray theory but they are designed to emphasize practical measures for radiation protection in x-ray technology. There is no charge for attending these institutes, which will be conducted in cooperation with the U.S. Public Health Service. The only involvement of MSNJ's co-sponsorship would be appropriate publicity through normal channels.

State Board of Medical Examiners . . . Directed that the special committee, designated to meet with representatives of the State Board of Medical Examiners on another matter, meet informally with that Board to discuss the present lack of provision in the Medical Practice Act to allow for suspension or revocation of a license to practice medicine and surgery of a physician who may authoritatively be deemed incompetent; and that formal recommendations be prepared for submission to the 1967 House of Delegates.

PHYSICIANS IN BANK CARD PROGRAMS

The growth and development of credit cards is burgeoning. A new form of card, the so-called *bank card,* is being widely introduced. Bank cards are issued without cost to the cardholder; they are acceptable at many more places than conventional credit cards; they are sponsored by large, reputable banks. They are an innovation in our economic system.

As these bank card plans have come into being, in all parts of the country, physicians have asked if they may ethically use bank cards as a form of payment for professional services. Some medical societies have said physicians may participate; others have said physicians may not.

The Judicial Council believes a uniformity of opinion is desirable. In matters of ethics it would seem indisputable that a general rule should be determined for the guidance of the profession, and that this rule should be implemented at the local level.

The medical profession has officially recognized that it cannot dictate to patients how they shall finance their medical bills. It can and should, however, determine principles to guide its members in determining whether and how they may participate in any payment program.

If the bank card were merely a substitute for cash or check in the payment of bills, little or no problem would be presented to physicians regarding their use; they would be merely a newly adopted medium of exchange. Bank cards, however, serve a twofold function: they are a convenience — a substitute for currency or check in the payment of indebtedness; and they are also a financing mechanism. Consequently, their indiscriminate use, especially the financing of larger medical bills through banks, could result in additional cost to patients. While the doctor's fee for medical care would not increase, the cost of financing payment of that fee through a third party would be imposed on the patient. Of course, patients may voluntarily elect to pay larger amounts in return for the convenience of a given program. Still, the medical profession has a responsibility to guard against patients being placed in untenable financial conditions because of overall medical care costs. That is why medicine has been in the forefront in encouraging prepayment and insurance programs to provide for the costs of medical services. It must, therefore, maintain its position of safeguarding patients' interests when considering new methods of financing personal indebtedness.

The Judicial Council is of the opinion that neither endorsement nor disapproval should be given to the bank card system at this time.

In June, 1965, the Judicial Council and the Council on Medical Service jointly agreed that any proposed plan for financing medical care or parts of medical care should be judged by the physician in the light of whether or not it might "result in advertising or solicitation of patients by physicians, profit to physicians for other than professional services, exploitation of the patient, or unnecessary increase in the cost of medical care."

Judged by these criteria, the Judicial Council is of the opinion, at this time, that physician participation in bank card programs is not *per se* unethical. Physicians may ethically accept bank cards in the payment of current medical bills in lieu of cash or check, that is, as a medium of exchange.

The use of bank cards in financing medical fees must, however, be viewed with reserve at the present stage of their development. While patients may not be denied the right to determine matters of their personal budgeting, physicians must not encourage the use of this financing method if in operation it might compromise the ideals of the medical profession or add to the financial burden of patients.

In connection with physician participation in bank card programs, the Judicial Council recommends the following principles, to be implemented and applied as necessary by the

county medical society, for the guidance of physicians as these programs develop.

1. The county medical society should be satisfied as to the financial and professional integrity of the plan. It should negotiate with the plan sponsors to insure that service charges to the physician are reasonable. It should insist that the plan be open to all physicians on the same terms and that it not exploit or capitalize on physicians' participation in the plan. It should advise the plan that the listing of physicians in directories of participating members is contrary to the ethics of the medical profession.

2. The individual physician may not, because of his participation, increase his fee for medical service rendered the patient. He may not use the plan to solicit patients. He may not encourage patients to use the plan. His position must be that he accepts the plan as a convenience to patients who desire to use it. Plaques or other devices indicating participation in the plan, within the physician's office, shall be kept to a discreet and dignified minimum. Plaques, signs, or other devices indicating such participation visible outside the physician's office are unacceptable.

3. The use of a bank card in connection with the payment of larger fees — which might normally be paid to the physician in installments — is not to be encouraged. All members of the Association are expected to continue the traditional practice of permitting patients of limited means to pay relatively large fees in installments without interest or carrying charges. Out of respect for the dignity and traditions of the medical profession, the physician may not relieve himself of his obligations "to render service to humanity, reward or financial gain being a subordinate consideration."

— Opinion of the AMA Judicial Council, Nov. 26, 1966.

LABORATORY SERVICE

The following questions and answers are provided by the Judicial Council in response to inquiries raised by a number of medical societies.

Q. A laboratory is owned by a physician who spends a small portion of his time directing and managing its financial and business affairs. The laboratory work is performed by technicians and directly supervised by a medical technologist with little or no participation by the physician-owner. The physician's name is used in connection with the laboratory in a manner to create the appearance that it is owned, operated, and supervised by a doctor of medicine. Is the physician engaged in an unethical activity? Would it make any difference if he were not the owner, but merely received compensation for his time? Or, if he were a partner with the supervising technologist or participated without receiving any compensation or share of the profits?

A. In each of the situations set forth above the physician would be guilty of deception and unethical conduct in misrepresenting or aiding the misrepresentation of laboratory services performed and supervised by a non-physician, as physician's services.

Q. A laboratory, owned, operated, and supervised by a non-physician in accordance with state law, performs tests exclusively for physicians who receive the results and make their own medical interpretations. Is it permissible for physicians to utilize the services of these laboratories?

A. The physician's ethical responsibility is to provide his patients with high quality services. This includes services which he performs personally and those which he delegates to others. A physician should not utilize the services of any laboratory, irrespective of whether it is operated by a physician or non-physician, unless he has the utmost confidence in the quality of its services. He must always assume personal responsibility for the best interests of his patients. Medical judgment based upon inferior laboratory work is likewise inferior. Medical considerations, not cost, must be paramount when the physician chooses a laboratory. The physician who disregards quality as the primary criterion or who chooses a laboratory because it provides him with low cost laboratory services on which he charges the patient a profit, is derelict in not acting in the best interests of his patient. However, if reliable quality laboratory services are available at lower cost, the *patient* should have the benefit of the savings. As a professional man, the physician is entitled to fair compensation for his services. He is not engaged in a commercial enterprise and he should not make a mark-up, commission, or profit on the services rendered by others.

— Action of the AMA House of Delegates in adopting an opinion of the Judicial Council, Nov. 26, 1966.

PENALTY FOR OVER-DUE ACCOUNTS

Since the practice of medicine is a profession and not a business, the practices adopted by businesses are not necessarily suitable for professional practice.

It is not in the best interest of the public or the profession to charge interest on an unpaid bill or note, or to charge a penalty on fees for professional services not paid within a prescribed period of time, nor is it proper to charge a patient a flat collection fee if it becomes necessary to refer the account to an agency for collection.

— Opinion of the AMA Judicial Council, Nov. 26, 1966.

PHYSICIANS SEEKING LOCATION IN NEW JERSEY

(Listed in order of receipt)

The following physicians have written to the Executive Offices of MSNJ seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physician. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly of them.

GENERAL PRACTICE — Carl W. Pflug, M.D., 4141 North Clarendon Avenue, Chicago, Illinois 60613. St. Louis University Medical School 1964. Associate or partnership. Available July 1967.

INTERNAL MEDICINE—Alfred M. Derrow. M.D., 555 Wisteria Way, San Rafael, California 94903. Tufts 1962. Available, July 1968.

Philip R. Fleishman, M.D., 269B Eaton Crest Drive, Eatontown, New Jersey 07724. Downstate Medical Center 1961. Associate or partnership. Available July 1967.

Robert M. Amick, M.D., 58 Francis Street, Boston, Massachusetts 02115. Yale University School of Medicine. Board eligible. Group or institution. Subspecialty — cancer chemotherapy. Available July 1967.

Irwin Weiner, M.D., 1405 New York Avenue, Brooklyn, New York. University of New York (Downstate Medical Center) 1963. Subspecialty—gastroenterology. Partnership or group. Available July 1967.

Laurence Novick, M.D., 510 East 85th Street, New York, New York 10028. Chicago Medical School, 1961. Subspecialty — hematology. Partnership or group. Available July 1967.

Bukosky, Richard J., M.D., 11816 West Bluemound Road, Wauwatosa, Wisconsin 53226. Marquette 1960. Board eligible. Subspecialty — allergy. Available July 1967.

Ruppenthal, C. Robert, M.D., 2607 Hampshire Road, Cleveland, Ohio 44106. University of Pennsylvania 1960. Board Eligible. Subspecialty — hematology. Associate or group. Available July 1967.

MacClary, Ronald G., M.D., 6 Granada Terrace, Middletown, Rhode Island 02840. University of Michigan 1958. Board eligible. Group, Available August 1967.

NEUROLOGY — Michael H. Schuman, M.D. 249th General Hospital, APO 96267, San Francisco, California. New York University School of Medicine 1961. Private or group. Board eligible. Available August 1967.

OBSTETRICS AND GYNECOLOGY—Earl P. Gelman, M.D., 5896B Adams Street, Fort Knox, Kentucky 40121. Chicago Medical School 1960.

Fabricant, Robert E., M.D., 5954 Wainwright Drive, Wainwright Heights, Fort Hood, Texas 76540. New York Medical College 1960. Partner or Associate. Available July 1967.

OPHTHALMOLOGY—Paul Todtfeld, M.D., 1346B Werner Park, Fort Campbell, Kentucky, 42223. State University of New York (Downstate) 1961. Board qualified. Available July 1967.

PATHOLOGY — Stahl, Melvin, M.D., 27 Bradford Road, Natick, Massachusetts 01760. Boston University School of Medicine 1956. Association (or solo) in community hospital. Available November 1967.

PSYCHIATRY — Stephen J. Barrett, M.D., 593 Magellan Avenue, San Francisco, California. Columbia College of Physicians and Surgeons 1957. Available summer 1967.

Ferris, Gilbert N., M.D., Quarters "D", U.S. Naval Hospital Key West, Florida 33040. Seton Hall College of Medicine 1961. Board eligible. Salaried position. Available July 1967.

SURGERY—David M. Hirsch, Jr., M.D., 267 East Burlington Street, Riverside, Illinois 60546. University of Chicago 1959. Board eligible. General and thoracic.

Martin Seidenstein, M.D., Box 1696, 7th Field Hospital, APO San Francisco 96594. State University of New York 1959. Partnership or group. Available July 1967.

James D. Cozzarelli, M.D., 849A Birch Circle, Fort Devens, Massachusetts. George Washington University 1959. Partnership or group. Available July 1967.

Robert E. Lazarus, M.D., 1441 NW 19th Street, Miami, Florida 33125. Northwestern University 1962. Board eligible. Associate leading to partnership. Available June 1967.

Leonardi, Henry B., M.D., Turnpike Road, Norwich, Vermont 05055. Hahnemann Medical College, 1958. Board eligible. Available June 1967.

Langsam, Lawrence B., M.D., 1707 Terry Avenue, Bellevue, Nebraska 68005. Downstate Medical Center 1960. Board certified. Group or partnership. Available August 1967.

WANT TO BE A BOOK REVIEWER?

Members sometimes ask what it takes to qualify as a book reviewer for this JOURNAL. The reviewer keeps the book. We need doctors who will send in the reviews within five weeks after getting the book. We can use not only specialists but also GP's, since many medical texts are aimed at family doctors. If interested, send in your name, address, kind of book you would like to review, plus assurance that you can have the typed review back within five weeks. Ask for our reviewers' instruction sheet. Write: Editorial Office, The Medical Society of New Jersey, P. O. Box 904, Trenton, New Jersey 08605.

ANNOUNCEMENTS

Dr. Allman Continues AMA Legislative Service

David B. Allman, M.D., has been reelected vice-chairman of the Council on Legislative Activities of the American Medical Association. This is the council which reviews all proposed federal legislation and recommends AMA action within existing policy; proposes changes in existing AMA policy where necessary to accomplish effective legislative goals; serves as a reference council to which all legislative issues of the Association are channeled prior to final consideration by the Board of Trustees; maintains constant surveillance of the legislative scene and future legislative needs; recommends to the Board of Trustees new federal legislation as well as legislation to modify existing laws of interest to the Association.

Symposium on Headache

June 17 at the Colony Resort in Atlantic City, the American Association for the Study of Headache will present a colloquium on this popular subject. Speakers will discuss ways of evaluating pain, pharmacology of anodynes, emotional aspects, newer drugs, and tension headache. For more details, write to Dr. Seymour Diamond, 5214 North Western Avenue, Chicago, Illinois 60625.

Award for Residents in Gynecology-Obstetrics

Residents in obstetrics and/or gynecology in New Jersey hospitals are eligible for a Williams Award, given by the American College of Obstetricians and Gynecologists. These are for original work by the resident resulting in preparation of a paper. Three awards will be made—$75, $150, and $250. For more information, write to Dr. Christopher Reilly, 172 Franklin Avenue, Ridgewood, New Jersey 07450. Deadline for submitting the paper is July 1, 1967.

Camp For Diabetic Children

The New York Diabetic Association is sponsoring a camp in up-state New York, to which diabetic children may be sent for one month without regard for the parents' ability to pay. This is the largest diabetic children's camp in the world. For further information, write to Camp Nyda, 104 East 40th Street, New York 10016.

New Vaccination Certificate

If your patient is going abroad this summer, he needs the new vaccination certificate, PHS-731. This new form provides space for indicating whether the vaccine used was liquid or freeze dried. The batch number of the vaccine must also be shown on the certificate. Yellow fever certification is also amended. To get your supply of the new form, send $5 to the Government Printing Office, Washington, D.C. 20402, and ask for one hundred International Vaccination Certificates — form number PHS-731.

Definitions of Live Birth and Still Birth

You may obtain without charge a unique pamphlet of state definitions of live births and fetal deaths. This 60-page brochure, PHS publication No. 1520, is available from the National Center for Health Statistics, United States Public Health Service, Washington, D.C. 20201. It includes the legal definitions of live birth and fetal death, still birth, and period of gestation for which registration is required.

When You Are Away

When you are away make sure that the patients who come to your office are seen by another M.D. If your office nurse or other non-medical personnel is giving injections or "treating" patients in your absence, you may be in violation of the Medical Practice Act.

Colonic Neoplasms Under Study

Your cooperation is requested in the referral, for immunologic studies, of patients with colonic neoplasms to the Clinical Center, National Institutes of Health in Bethesda, Maryland.

Needed for these studies are patients who have familial polypoidosis or villous adenoma, and a limited number with adenomatous polyps and invasive malignant disease of the colon and rectum. Selected patients will be extensively investigated both preoperatively and postoperatively.

Physicians interested in having their patients considered for admission to these studies may write or telephone Alfred S. Ketcham, M.D., Clinical Center, Room 10-N-116, National Institutes of Health, Bethesda, Maryland 20014. The telephone is 656-4000, Extension 64164 (area code 301).

OBITUARIES

Dr. Vincent Paul Butler*

One of New Jersey Medicine's most valuable members — Dr. Vincent P. Butler — died on March 5, 1967. Dr. Butler was born in Jersey City in 1893. He received his BA at St. Peter's in 1914, and a year later won an MA in philosophy. In 1954, his alma mater gave him an honorary doctorate in science. He was graduated from Columbia University's College of Physicians and Surgeons in 1919 and then won one of the coveted Bellevue internships. A year later he accepted an internship at St. Vincent's Hospital in New York, and in 1922 returned to his native city to enter private practice. At first he was a regular family doctor — not then an obsolete species — but he developed increasing interest in urology. By 1929 he was able to devote himself exclusively to that specialty. He was elected to the American Urological Association in 1937 and was certified as a diplomate of the American Board of Urology in 1942.

Dr. Butler rose through the ranks at both the Jersey City Medical Center and the St. Francis Hospital in Jersey City, eventually becoming Attending Urologist at both. He was also a consultant in urology at St. Mary's Hospital (Hoboken) and at the Bayonne Hospital.

He served The Medical Society of New Jersey in the many positions listed on page 153 of this issue — and in many other ways too. He was President of this Society in 1955-56.

Dr. Ernest G. Hummel

At the grand old age of 90, Dr. Ernest G. Hummel died at his home on February 14, 1967. Born in 1877, he received his M.D. at the University of Maryland in 1902. He was a pioneer in pediatrics — one of the first New Jersey physicians to enter that specialty. He was identified with the Cooper Hospital in Camden, passing through all grades, becoming chief of pediatrics there in 1912. In 1950 he retired from active practice. He was a founding fellow of the American Academy of Pediatrics and had several tours of duty as chairman of our Society's Section on Pediatrics. He was a recipient of our Society's Golden Merit Award in 1957. In the 1930's, Dr. Hummel was active in the affairs of the Camden County Medical Society.

* For editorial comment on Dr. Butler, see page 153 of this issue.

MEETINGS OF MEDICAL INTEREST

This listing has been compiled by the Academy of Medicine of New Jersey. For additional information, including exact time of meetings, write to the society or hospital listed.

1967
April

11 **Bergen County Medical Society**

11 **Cumberland County Medical Society**

12 **Ocean County Medical Society**

12 **New Jersey Allergy Society**
The Brunswick Inn — Dinner meeting
"The Allergist and the Cosmetic Industry, a Mutual Responsibility"

13 **Burlington County Medical Society**

13 **The Academy of Medicine of New Jersey**
Presbyterian Hospital, Newark
"Plain Film Diagnosis of Abnormalities of the Spine"

13 **St. Mary's Hospital and Hahnemann Medical College Faculty**
St. Mary's Hospital, Passaic
"Electrolytes and Bowel Obstruction"

14 **Warren Hospital, Phillipsburg**
"Myocarditis and the Myocardiopathies"

17 **Newark Beth Israel Hospital**
"Current status of Surgery for Peptic Ulcer"

18 **Warren County Medical Society**

18 **Essex County Medical Society**
"Counseling Sexually Incompatible Marriage Partners"

18 **The Society of Clinical Psychiatrists of Northern New Jersey**
Beth Israel Hospital, Passaic
"Emotional Problems of the Obstetrical Patient"

19 **Clara Maass Memorial Hospital**
"Intensive Care of the Cardiac"

19 **Middlesex County Medical Society**

19 **New Jersey Water Pollution Control Association Annual Meeting**
Colony Motel, Atlantic City

20 **Morris County Medical Society**

20 **Somerset County Heart Association**
Somerset Hospital
Symposium on Cardiovascular Disease

20 **Monmouth Medical Center**
"Recent Advances in Diabetes"

22-23 **New Jersey Medical Assistants' Association**
Claridge Hotel, Atlantic City

25 **The Academy of Medicine of New Jersey**
Muhlenberg Hospital, Plainfield
"Acute and Chronic Care of the Alcoholic"

25 **The Society of Clinical Psychiatrists of Northern New Jersey**
Beth Israel Hospital, Passaic
"Headaches"

26 **Monmouth County Medical Society**

26 **Mountainside Hospital**
Montclair
"Myocarditis and the Myocardiopathies"

27-28 **American Pediatric Society**
Seaside Hotel, Atlantic City

28 **The Academy of Medicine of New Jersey**
Rutgers-Newark, New Campus
"Recent Advances in Neurophysiology"

29 **The Academy of Medicine of New Jersey**
St. Barnabas Medical Center, Livingston
"Respiratory Physical Therapy"

29 **American Society for Clinical Nutrition**
Lafayette Motor Hotel, Atlantic City

30 **American Federation for Clinical Research**
Chalfonte-Haddon Hall, Atlantic City

30 **American Society for Clinical Investigation**
Chalfonte-Haddon Hall, Atlantic City
(through May 3)

May

2 **Hudson County Medical Society**

3 **Camden County Medical Society**

3 **New Jersey Welfare Council Annual Conference**
Military Park Hotel, Newark

3 **New Jersey State Department of Health and Monmouth Medical Center**
Long Branch
Cleft Palate Symposium

4 **Middlesex County Medical Society**

4 **New Jersey College of Medicine and Dentistry**
Postgraduate Course in Psychiatry

9 **Bergen County Medical Society**

9 **New Jersey Dermatological Society**
Chanticleer, Millburn (dinner meeting)
"The Skin and How it Ages"

10 **Hackensack Hospital**
"Recent Advances in Diabetes"

10 **Mercer County Medical Society**
"History of Cardiac Surgery"

11 **Burlington County Medical Society**
Annual Ladies' Night

11 **Essex County Medical Society**

11 **New Jersey College of Medicine and Dentistry**
Postgraduate Course in Psychiatry

11 **St. Mary's Hospital and Hahnemann Medical College Faculty**
Passaic
"Respiratory Disease"

13-17 **Annual Meeting of The Medical Society of New Jersey**
Chalfonte-Haddon Hall, Atlantic City

16 **The Academy of Medicine of New Jersey**
Haddon Hall, Atlantic City
"Accidental Poisoning"

16 **Hackensack Hospital Association**
Hackensack
"Recent Advances in Diabetes"

17 **New Jersey State Department of Health**
Workshop on State Health Aid

18 **Somerset County Medical Society**

18 **The Academy of Medicine of New Jersey**
Somerset Hospital, Somerville
"Recent Advances in G. I. Malignancy"

18 **New Jersey College of Medicine and Dentistry**
Postgraduate Course in Psychiatry

19 **Industrial Medical Association**
General Motors Plant
Linden

23 **Passaic County Medical Society**

24 **Princeton Hospital**
"Intensive Care of the Cardiac"

25 **New Jersey College of Medicine and Dentistry**
Postgraduate Course in Psychiatry

30 **Cape May County Medical Society**

LETTERS TO THE JOURNAL

In Defense Of Vitamins

Gentlemen:

We were reading the February issue of your fine journal and noted with great surprise the editorial entitled, "The Great Vitamin Passion".

No doubt the editor felt that a "stand" was indicated regarding the attitude of the Food and Drug Administration on the vitamin product field. Your position that the vitamin is the "world's most expensive placebo" is an extremely broad statement. To say the least, it is an unfair position to take when some of your advertisers market vitamin products.

Without qualification you have derided the vitamin products in general without allowance or recognition of the great value of a therapeutic vitmain or a specific vitamin that might be used in frank cases of deficiency with a great need for vitamins in certain stress states, including pre- and post-operative use.

It is granted that the editorial policy of periodicals and newspapers must be allowed certain freedom of thought, but only if they are complete in their view and recognize both sides of the story.

Sincerely yours,
R. E. Teagen, Vice-President
S. J. Tutag and Company
Detroit, Michigan

The Tutag Company makes Geritag, which is full of vitamins.

—Editor

The Amin Of The Vitamins

Dear Doctor Davidson:

An article in the current issue of the Journal of The Medical Society of New Jersey under "Editorials" is entitled "The Great Vitamin Passion." I have the impression that the author of this article does not know the origin of the word "vitamin." As I recall, vitamin D was the first one discovered. And at that time it was thought to be an amino acid; and in view of the prevalence of rickets and many cases of florid rickets, the vitamin was considered vital—hence vital amino acid contracted became vitamin.

If I am in error, I should like to hear from the author of the article I refer to.

Sincerely,
Frederick H. von Hofe, M.D.
East Orange

Dear Doctor von Hofe:

Thank you for your perceptive letter. You are quite right, of course. What I had in mind was not the historical background of the "-amin" syllable, but rather its connotation to the average layman. This is only folk etymology, to be sure, but the sense of "strong medicine" *is* implicit in the "-in" ending to an unsophisticated reader.

Thanks again.

Sincerely,
Henry A. Davidson, M.D.
Editor

BOOK REVIEWS

Cat. Theodore Isaac Rubin, Ph.D. New York, 1966, Ballantine Books. Pp. 128 (Paperbound 75¢)

Our knowledge of the world of the catatonic individual is derived from the reports we hear from returning travelers and from whatever understanding we have gained from our own moments of stupor and retreat. Dr. Rubin's moving account of the hidden life of the catatonic patient follows generally accepted descriptions of fairly well-defined stages of schizophrenia. Dr. Rubin does not see schizophrenia primarily as a strategy. He underplays the cat and mouse game going on between therapist and patient. A catatonic patient, with whom this reviewer spoke for almost a year, reported after she had returned to work that from the earliest period of seeming isolation she had constantly watched the therapist's face to note any possible expression of disgust. Her willingness to communicate with the therapist was dependent upon his ability to remain unmoved by her supposedly revolting behavior. Likewise, the autistic youngster who had not spoken to his parents for many months, when told in the very first session that no one was going to let him get away with this indefinitely, replied, "You want to bet?" Such anecdotes cast some doubt on schizophrenia as going through the carefully defined stages that Dr. Rubin describes.

Emphasis on stages rather than interactions conveys the unfortunate impression that the therapist is dealing with a process rather than a person. Dr. Rubin presents the psychiatrist as patient and devoted in marked contrast to the attendants who can become increasingly involved with the patient only through contact with the understanding psychiatrist. In a world that quickens as much to the kiss of the politician as to the kiss of the prince of psychiatry, perhaps it is only the schizophrenic individual who still waits for the kiss of the prince. If hospital attendants were more human and more "related" it might, perhaps, not be so necessary for the princes to be so distinctively kind and concerned.

Whatever questions may be raised as to the authenticity of Dr. Rubin's presentation, he has given a feeling, moving account of a realm of experience which we need to recognize as being closely akin to our own if we are ever to deal effectively with human desolation and loneliness. Irving Markowitz, M.D.

Ocular Therapy — Complications and Management. Irving H. Leopold, M.D. St. Louis, 1966, Mosby. Pp. 157. Illustrated. ($11.00)

This publication comes from two symposia on ocular drug complications and management conducted by the American Academy of Ophthalmology and Otolaryngology. The material includes nearly all aspects of ophthalmologic therapy. Most of it is topical; for example, one chapter by Dr. Frank Newell discusses problems in the use of anticancer agents in ophthalmology. Dr. Herbert Kaufman writes about problems in virus chemotherapy. This chapter covers both local ocular and systemic virus chemotherapy. The latter section lists many experimental drugs now undergoing extensive clinical trials. It gives the reader a preview of some of the therapeutic tools he may have available in the world of tomorrow.

An excellent source of information is the chapter on anesthetic agents in ophthalmology by John Harris and James Householder. The ophthalmologist who uses general anesthesia infrequently will appreciate the section dealing with the choice of drugs at his disposal. Here too, the authors discuss cardiac arrest, its usual causes and the management of the condition.

This well written book includes good tables, useful references and a complete index. At a time when more and more new drugs are being used, a manual dealing with the complications and management of ocular therapy will be welcomed by ophthalmologists.

Bernard Susskind, M.D.

Theory and Practice of Psychiatry. F. C. Redlich and D. F. Freedman, M.D. New York, 1966, Basic Books. Pp. 880. ($12.50)

Psychiatry as an applied medical science, must increasingly rest on the foundation of basic biologic and behavorial sciences. This book was written, as prefaced by the authors, to serve as "a modern guide to the complex field of psychiatry and to introduce the reader to the essentials of psychiatric theories and practices and their evolution."

The writers adhere to these aims. They start with a broad discussion of the field. Then they review psychiatric practice and theory, past and present. They elaborate on normal and abnormal behavior and complete their presentations with well documented didactic material on mental diseases. They include three specific chapters by eminent leaders in related fields; Roy Schafer on "Psychologic Tests;" Seymour Sarason on "Mental Subnormality;" and Seymour Lustran on "Behavior Disorders in Childhood and Adolescence." The authors do not allow any area of psychiatry to go by default, nor do they permit any single attitude to dominate their text.

One must agree with Elkes who has stated that Redlich and Freedman "have produced a text that, while thoroughly modern, is firmly rooted in history. Within its 880 pages, one finds the keen imprint of the combined knowledge, experience, and fresh perspectives of two psychiatrists who are well grounded in the behavorial, social, biological and psychoanalytic sciences." I would wish, however, that elaborations upon organic therapies and psychosomatic diseases could have been made to enrich the knowledge of the more sophisticated reader. Their comments on community psychiatry could likewise have been broadened to encompass the stimulating concepts of some pioneers and leaders in this field. In their discussion of religion and philosophy, one wonders why they limited this to Kierkegaard, Tillich, and James. It seems to me that additional other philosophers merit consideration.

Redlich and Freedman have succeeded in delineating to the reader how behavior gets put together and how it becomes disorganized. They have presented their writings in a critical and undogmatic manner. They realize that in so swiftly an expanding field, the textual material as well as the bibliographies could not be anything but selective and limited. The future of psychiatry, its proper scope, its emphases, and its directions may be far from certain. This does not mean that there is no set axis of problems, issues, facts, and approaches that identifies the body of general psychiatric knowledge. It is this core of theory and practice that Redlich and Freedman have presented in this fine book.

Harold S. Feldman, M.D.

Caries Resistant Teeth. Edited by G. E. W. Wolenstenholme and Maeve O'Connor. Little, Brown & Co., Boston, 1965. Price not stated.

To the serious student, or the general dental practitioner who might want to familiarize himself with all current information, this work is invaluable. Practically all known research relating to the subject was discussed in some detail. Papers included extensive treatment of epidermiologic studies involving intrinsic and extrinsic host factors and those of the environment *per se;* the importance of heredity; relationship of resistance of one surface of a tooth to another; carries immunity in experimental animals with a cariogenic diet; the interrelationship of chemical and physical factors in caries resistant teeth; and the "ultra" structure of enamel as viewed by the electron microscope. Other subjects treated were the equilibrium between plaque and enamel, the importance of trace elements in enamel apatite, the role of saliva, dietary and evironmental factors, and bacteriology of caries resistance.

Generally, it was concluded that there is inadequate evidence to assume the existence of a caries resistant tooth. However, a number of important factors exist which will reduce the rate of enamel dissolution. These included fluoride content, the solubility rate of enamel, calcium, and phosphate ions from the saliva, precipitated salivary mucin which clings to the tooth surfaces and retards the rate of diffusion and hence, the dissolution of enamel, and the bacterial plaque which is partly influenced by dissolved agents from enamel, including fluoride, calcium and phosphate which also tend to slow down further enamel dissolution.

E. Weisinger, D.D.S.

Hematologic Problems in the Newborn. Frank A. Oski, M.D. and J. Lawrence Naiman, M.D. (Vol. IV In the Series, Major problems in Clinical Pediatrics.) Philadelphia, 1966, Saunders. Pp. 294. Illustrations. (Price not stated.)

This well written and complete presentation of hematology in the newborn reviews major and minor problems of blood disorders in the prenatal and neonatal period. Current literature and new ideas are ably incorporated into the text. Tables and figures are easily understandable, pertinent, and right to the point. Controversial material is analyzed and fairly presented. This book fills a great need for those who handle infants and children.

The sections on G-6 P D deficiency in the newborn and pyruvate kinase deficiency are illuminating. A chapter on the thrombocytopenias is complete and especially rewarding. The bibliography is exhaustive and up-to-date. The well qualified authors have prepared an easily readable and superb book which will fill a great need on most bookshelves.

Benjamin B. Kaplan, M.D.

ABSTRACTS

ON TUBERCULOSIS AND OTHER RESPIRATORY DISEASES. ISSUED BY THE NATIONAL TUBERCULOSIS ASSOCIATION

APRIL, 1967 • VOL. XXXX, NO. 4

RHINOVIRUS INFECTIONS IN AN INDUSTRIAL POPULATION

In a three-year study of a group of employees, rhinovirus infections were the most common identifiable cause of acute respiratory disease. Peak periods were in the early fall, which would be the time to test the prophylactic value of potential antiviral compounds.

In an effort to determine the etiology and epidemiology of acute respiratory disease in a population of working adults, an evaluation of the role of a number of viruses was undertaken in a three-year study begun in March 1963.

The study population consisted of employees of the Eastern Regional Office of State Farm Mutual Insurance Companies in Charlottesville, Virginia, with approximately 550 employees participating the first two years and 350 the next.

Eighty-three per cent of the employees were less than 35 years of age, 59 per cent were women, and 30 per cent had children in school.

Employees were asked to keep a record of the number of respiratory, gastrointestinal, and general symptoms, and also of vacation periods and other times away from work. In addition, several supplementary surveillance methods were devised to evaluate the validity and reliability of the basic method of surveillance.

As a result of information gained from the supplementary procedures, on-the-floor surveillance was instituted in September, 1964. This was done by having the study nurse get in touch with employees personally on a rotating schedule so that each week she visited every employee in the building, kept records herself, and encouraged accurate reporting. Employees were requested to report to the medical department at the onset of illness. They were examined by one or more physicians or a specially trained nurse; nose and throat swabs were collected, and acute-phase and convalescent-phase blood specimens were drawn when possible. During the first year 810 specimens were collected from subjects who had been free of respiratory symptoms for a minimum of two weeks.

Diseases Reported

A total of 3,314 respiratory, 268 gastrointestinal, and 117 combined respiratory and gastrointestinal illnesses were reported. Of these, 1,025 respiratory and combined respiratory and gastrointestinal illnesses were studied for viral agents, a 30 per cent sample of all illnesses with respiratory symptoms.

Respiratory illness constituted the great bulk of all illnesses recorded. Seasonal variations occurred, with particularly prominent peaks in September. Gastrointestinal and combined respiratory and gastrointestinal illnesses were low and remained relatively constant throughout the year.

Results of the supplementary surveillance studies prior to weekly on-the-floor surveillance indicated that between 20 per cent and 40 per cent of the illnesses were not being recorded or were being recorded inaccurately.

JACK M. GWALTNEY, JR., M.D.; J. OWEN HENDLEY, M.D.; GILBERT SIMON, M.D.; and WILLIAM S. JORDAN, M.D. *The New England Journal of Medicine,* December 8, 1966.

The attack rate for the population as a whole was 2.3 respiratory illnesses per person per year. Rates were slightly higher for women than for men, the excess in women being in the group from 16 to 24 years of age. Rates were not influenced by the presence of children in the home or by cigarette smoking.

During a one-year period which was specially analyzed, 23 per cent of employees reported no illnesses, 60 per cent had one, two, or three, and 17 per cent had four or more.

Rhinoviruses were isolated during the first 12 months from 19.5 per cent of 433 specimens from patients with respiratory illness and from 2.1 per cent of 810 specimens from well subjects. Over the three years, 239 rhinoviruses were isolated from 1,025 respiratory illnesses, an overall rate of 23.3 per cent.

In each of the three years of the study there was a peak of illness in September and early October associated with a high rhinovirus isolation rate. Comparison of specimens collected from multiple sites and processed separately indicated that the success of isolation varied with the site from which the specimen was obtained. Rhinoviruses were isolated with greatest frequency from the nose.

Self-diagnosed respiratory illnesses accounted for 36 per cent of the total absenteeism recorded by the company's medical department. Ill-defined constitutional illnesses, many with gastrointestinal symptoms, ranked next as a cause of absenteeism.

Implications of the Data

Data from this longitudinal study of acute respiratory illness in young civilian adults strengthened the rapidly increasing body of evidence relating members of the group of acid-labile picornaviruses known as "rhinoviruses" to the common-cold syndrome.

Although rhinoviruses were recovered from a few asymptomatic subjects, prevalence data indicated a clear association with illness. Within the rhinovirus group alone there are perhaps as many as 100 serotypes. Since rhinoviruses stimulate antibody production and resistance to reinfection, it is clear that a major explanation for the frequency of respiratory infections is the large number of different agents capable of inducing them.

Rhinoviruses Predominate

The finding in the employees of high percentages of rhinovirus isolation coincident with the early fall peaks of respiratory illness indicates that it is primarily rhinovirus infections that usher in the respiratory-disease season in this population.

The cause of the seasonal variations in respiratory illness is a mystery, largely unexplained by studies of meterologic and other environmental factors. That increased rates of respiratory illness are associated with school attendance has been clearly shown, and may be a factor in the rapid buildup of respiratory illness in September. Paradoxically, rhinoviruses have not been shown to cause a major proportion of acute respiratory illness in children.

Nasal swabs were found to be superior to pharyngeal swabs or saliva as a source of virus. This fact raises the question of whether rhinovirus infection occurs predominantly in nasal or other ciliated mucosal cells, the presence of virus in pharyngeal secretions or saliva being the result of virus shedding from the nose.

Perhaps the optimal time to search for new agents would be during periods of high illness but low rhinovirus prevalence, as from January to March. Prophylactic administration of antiviral compounds, rather than multivalent vaccines, may be the answer to the control of rhinovirus common colds. The best time to undertake a controlled trial of potential antirhinoviral drugs in such an industrial group would be early September through October.

NEW JERSEY TUBERCULOSIS AND HEALTH ASSOCIATION
15 EAST KINNEY STREET, NEWARK, NEW JERSEY 07102



Diagnosis:

cystitis?
pyelonephritis?
pyelitis?
urethritis?
prostatitis?

in any case,
usually gram-negative*

Therapy:

two 500 mg. Caplets® q.i.d
(initial adult dose)

Indications: Urinary tract infections caused by gram-negative and some gram-positive organisms.

Side effects: Mainly mild, transient gastrointestinal disturbances; in occasional instances, drowsiness, fatigue, pruritus, rash, urticaria, mild eosinophilia, reversible subjective visual disturbances (overbrightness of lights, change in visual color perception, difficulty in focusing, decrease in visual acuity and double vision), and reversible photosensitivity reactions. Marked overdosage, coupled with certain predisposing factors, has produced brief convulsions in a few patients.

Precautions: As with all new drugs, blood and liver function tests are advisable during prolonged treatment. **Pending further experience, like most chemotherapeutic agents, this drug should not be given in the first trimester of pregnancy. It must be used cautiously in patients with liver disease or severe impairment of kidney function.** Because photosensitivity reactions have occurred in a small number of cases, patients should be cautioned to avoid unnecessary exposure to direct sunlight while receiving NegGram, and if a reaction occurs, therapy should be discontinued. The dosage recommended for adults and children should not arbitrarily be doubled unless under the careful supervision of a physician. Bacterial resistance may develop.

When testing the urine for glucose in patients receiving NegGram, Clinistix® Reagent Strips or Tes-Tape® should be used since other reagents give a false-positive reaction.

Dosage: Adults: Four Gm. daily by mouth (2 Caplets® of 500 mg. four times daily) for one to two weeks. Thereafter, if prolonged treatment is indicated, the dosage may be reduced to two Gm. daily. Children may be given approximately *25 mg. per pound* of body weight per day, administered in divided doses. The dosage recommended above for adults and children should not arbitrarily be doubled unless under the careful supervision of a physician. Until further experience is gained, infants under 1 month should not be treated with the drug.

How supplied: Buff-colored, scored Caplets® of 500 mg. for adults, conveniently available in bottles of 56 (sufficient for one full week of therapy) and in bottles of 1000. **250 mg. for children,** available in bottles of 56 and 1000.

References: (1) Based on 23 clinical papers, 1512 cases. Bibliography on request. (2) Bush, I. M., Orkin, L. A., and Winter, J. W., in Sylvester, J. C.: Antimicrobial Agents and Chemotherapy—1964, Ann Arbor, American Society for Microbiology, 1965, p. 722.

Winthrop

Winthrop Laboratories, New York, N. Y. 10016

NegGram

Brand of

nalidixic acid

a specific anti-gram-negative

eradicates most urinary tract infections...

- Low incidence of untoward effects; no fungal overgrowth, crystalluria, ototoxic or nephrotoxic effects have been observed.
- "Excellent" or "good" response reported *in more than 2 out of 3* patients with either chronic or acute gram-negative infections.[1]

*As many as 9 out of 10 urinary tract infections are now caused by gram-negative organisms: E. coli, Klebsiella, Aerobacter, Proteus, Paracolon or Pseudomonas[2]... However, infections of the urethra and prostate caused by non-gonococcal gram-negative organisms are believed to be less prevalent.

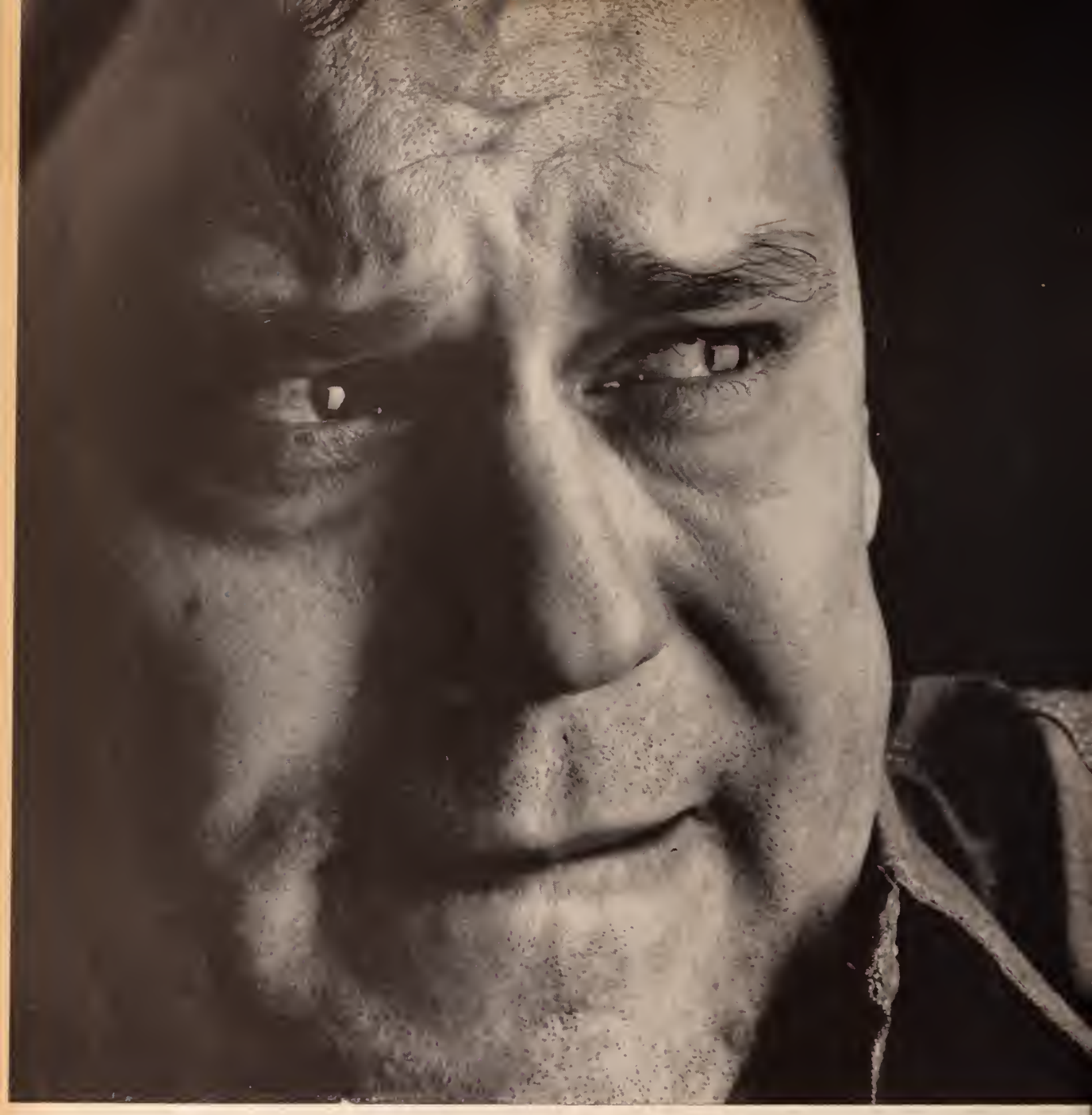


Photo professionally posed

Mike expects a penicillin injection. He's about to be pleasantly surprised.

His physician is going to prescribe an oral penicillin —PEN•VEE® K (potassium phenoxymethyl penicillin). It's usually so rapidly and completely absorbed that therapeutic serum levels are produced in 15 to 30 minutes. Higher serum levels generally last longer than with oral penicillin G.

Indications: Infections due to pathogens susceptible to oral penicillin G. Prophylaxis of rheumatic fever in patients with previous history of the disease.

Precautions: Skin rash, symptoms resembling those of serum sickness, or other manifestations of penicillin allergy may occur. Measures for treating anaphylaxis should be readily available: epinephrine, oxygen and pressor drugs for relief of immediate allergic reactions; antihistamines and corticosteroids for delayed effects. Penicillin may delay or prevent the appearance of primary syphilitic lesions. Patients with gonorrhea who are suspected of concurrent syphilitic infections should be tested serologically for at least 3 months. Where lesions of primary syphilis are suspected, dark-field examination should precede use of penicillin. As with other antibiotics overgrowth of nonsusceptible organisms may occur; if so, discontinue and take appropriate measures. Treat β-hemolytic streptococcal infections with full therapeutic dosage for at least 10 days to prevent development of rheumatic fever or glomerulonephritis.

Contraindications: Infections caused by nonsusceptible organisms; history of penicillin sensitivity.

Composition: Tablets—125 mg. (200,000 units) and 250 mg., (400,000 units); Liquid—125 mg. (200,000 units) and 250 mg. (400,000 units) per 5 cc.

Wyeth Laboratories Philadelphia, Pa.

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(potassium phenoxymethyl penicillin) Wyeth®



NUMA® DURA-TABS®

for *prolonged* aid to ventilation

Each Numa Dura-Tab provides:

theophylline	225 mg.
ephedrine HCl	50 mg.
butabarbital	25 mg.

(Warning: butabarbital may be habit-forming.)

Numa Dura-Tabs provide *prolonged* three-way action to ease breathing. Theophylline, a potent bronchodilator with minimal effect on the CNS, opens air passages and reduces bronchial spasm. Ephedrine HCl improves breathing capacity through its decongestant action. Butabarbital, a mild sedative, allays fear and apprehension.

Dosage: One Numa Dura-Tab every 8 to 12 hours helps keep the asthmatic patient symptom-free all day/all night.

Precautions: Use with caution in cardiovascular or hyperthyroid disease, severe hypertension, circulatory collapse, prostatic hypertrophy, or glaucoma.

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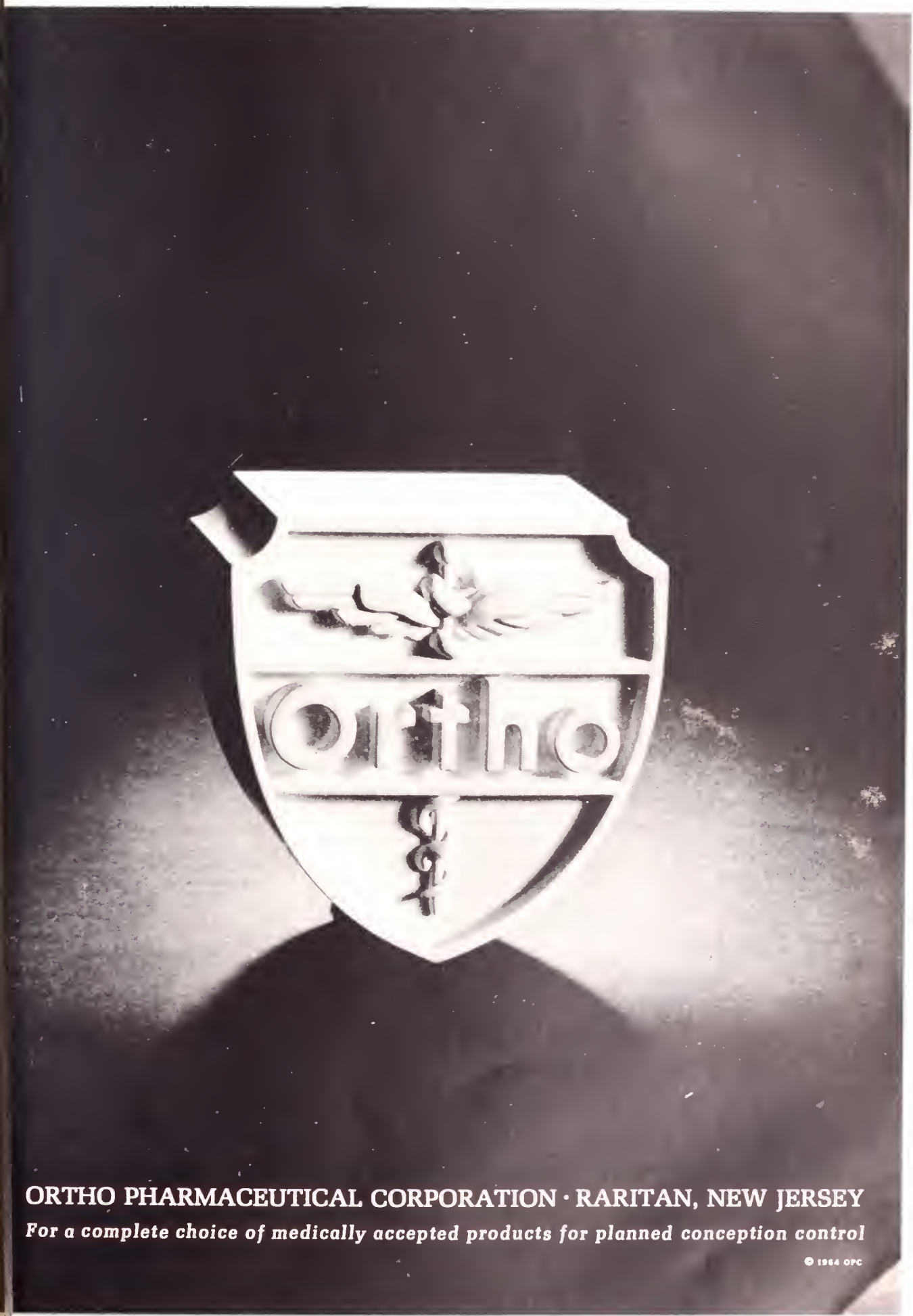
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when he just can't sleep

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Sodium Amobarbital and Sodium Secobarbital

(One-Half Sodium Amobarbital and One-Half Sodium Secobarbital)



Tuinal helps wakeful patients fall asleep fast, stay asleep all night.

Indications: Tuinal, comprised of equal parts of Seconal® Sodium (sodium secobarbital, Lilly) and Amytal® Sodium (sodium amobarbital, Lilly), is indicated for prompt and moderately long-acting hypnosis.

Contraindications: Barbiturates should not be administered to anyone with a history of porphyria, nor should they be given in the presence of uncontrolled pain, because excitement may result.

Warning: May be habit-forming.

Precautions: Tuinal should be used cautiously in patients with decreased liver function, since prolongation of effect may occur.

Adverse Reactions: Idiosyncrasy, such as excitement, hangover, or pain, may appear. Hypersensitivity reactions occur in some patients, especially in those with asthma, urticaria, or angioneurotic edema.



Dosage: 1½ to 3 grains at bedtime.

Supplied: ¾, 1½, and 3-grain Pulvules®.

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about

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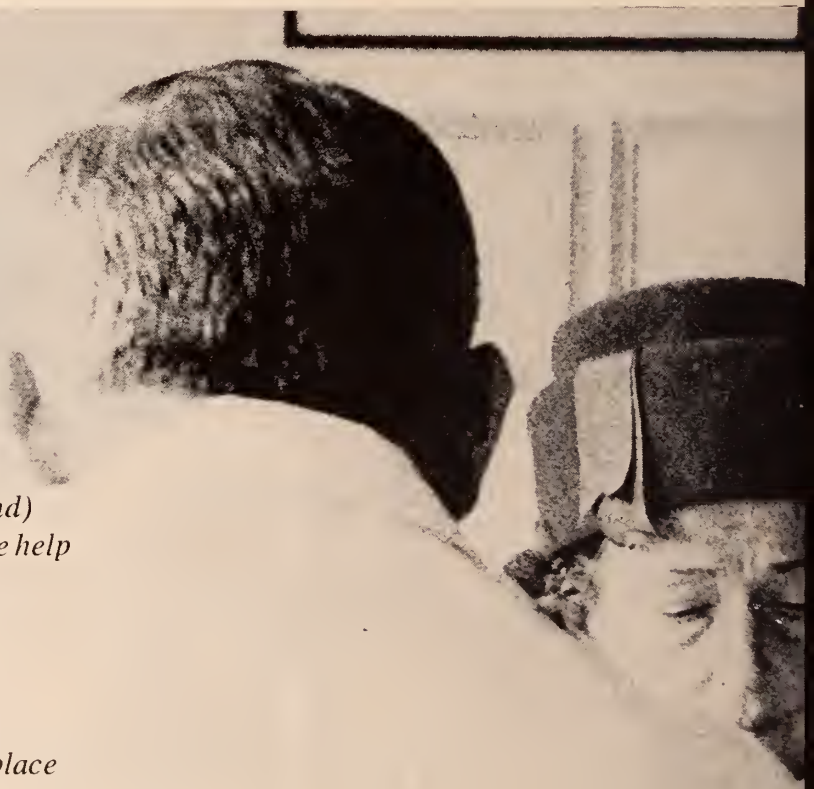
Caution: As with other antibiotic products, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

Supplied in ½ oz. and 1 oz. tubes.

Complete literature available on request from Professional Services Dept. PML.

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The Mediatric Age:
There is a growing senescent body of people on their way to malignant inactivity, who sorely need your interest and direction to help them back to a more active and useful life. There are medicines too, designed to help. One such has proved useful in clinical practice.



"A steroid-nutritional compound (Mediatric) was used in 100 patients to relieve some of the symptoms caused by degenerative changes of aging . . . This therapy resulted in improvement of 75 per cent of the patients . . ."

McNeill, A. J.: Clin. Med. *8*:518 (Mar.) 1961.

"Mediatric (steroid-nutritional compound) capsules, one a day, seem to give definite help to debilitated patients."

Arnold, E. T., Jr.: Geriatrics *12*:612 (Oct.) 1957.

"Nutritional and hormone bolstering of function in the aged may have a useful place in geriatrics."

Morgan, A. F.: Gerontologist *2*:77 (June) 1962.

"In diets which for any reason are restricted in calories, enough of these substances (B vitamins) may not be supplied . . . The use of B and C vitamin supplements may then be justified and indeed may be necessary."

Morgan, A. F.: Gerontologist *2*:77 (June) 1962.

"Intensive nutritional therapy is necessary, especially in elderly people, to correct dietary deficiencies created by large losses of protein, vitamins and other nutrients."

Riccitelli, M. L.: J. Am. Geriatrics Soc. *12*:489 (May) 1964.

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Nutritional reinforcement for those who can't – or won't – eat properly...balanced amounts of estrogen and androgen to counteract declining gonadal hormone secretion and its sequelae of premature degenerative changes...mild antidepressant for a gentle "mood" uplift...

The estrogen component in MEDIATRIC is PREMARIN® (conjugated estrogens—equine), the natural estrogen most widely prescribed for its superior physiologic and metabolic benefits.

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Each 15 cc. (3 teaspoonfuls) contains:

*Conjugated estrogens—equine (Premarin®)	0.25 mg.
Methyltestosterone	2.5 mg.
Thiamine HCl	5.0 mg.
Cyanocobalamin	1.5 mcg.
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Contains 15% alcohol

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Each MEDIATRIC Tablet or Capsule contains:

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Methyltestosterone	2.5 mg.
Ascorbic acid	100.0 mg.
Cyanocobalamin	2.5 mcg.
Intrinsic factor concentrate	8.0 mg.
Thiamine mononitrate	10.0 mg.
Riboflavin	5.0 mg.
Niacinamide	50.0 mg.
Pyridoxine HCl	3.0 mg.
Calc. pantothenate	20.0 mg.
Ferrous sulfate exsic.	30.0 mg.
Methamphetamine HCl	1.0 mg.

*Orally active, water-soluble conjugated estrogens derived from pregnant mares' urine and standardized in terms of the weight of active, water-soluble estrogen content.

MEDIATRIC helps keep the older patient alert and active; helps relieve general malaise, easy fatigability, vague pains in the bones and joints, loss of appetite, and lack of interest usually associated with declining gonadal hormone secretion.

CONTRAINDICATION: Carcinoma of the prostate, due to methyltestosterone component.

WARNING: Some patients with pernicious anemia may not respond to treatment with the Tablets or Capsules, nor is cessation of response predictable. Periodic examinations and laboratory studies of pernicious anemia patients are essential and recommended.

SIDE EFFECTS: In addition to withdrawal bleeding, breast tenderness or hirsutism may occur.

SUGGESTED DOSAGES: *Male and female:* 3 teaspoonfuls of Liquid, 1 Tablet, or 1 Capsule, daily or as required.

In the female: To avoid continuous stimulation of breast and uterus, cyclic therapy is recommended (3 week regimen with 1 week rest period—Withdrawal bleeding may occur during this 1 week rest period).

In the male: A careful check should be made on the status of the prostate gland when therapy is given for protracted intervals.

SUPPLIED: No. 910 – MEDIATRIC Liquid, in bottles of 16 fluidounces and 1 gallon. No. 752 – MEDIATRIC Tablets, in bottles of 100 and 1,000. No. 252 – MEDIATRIC Capsules, in bottles of 30, 100, and 1,000.



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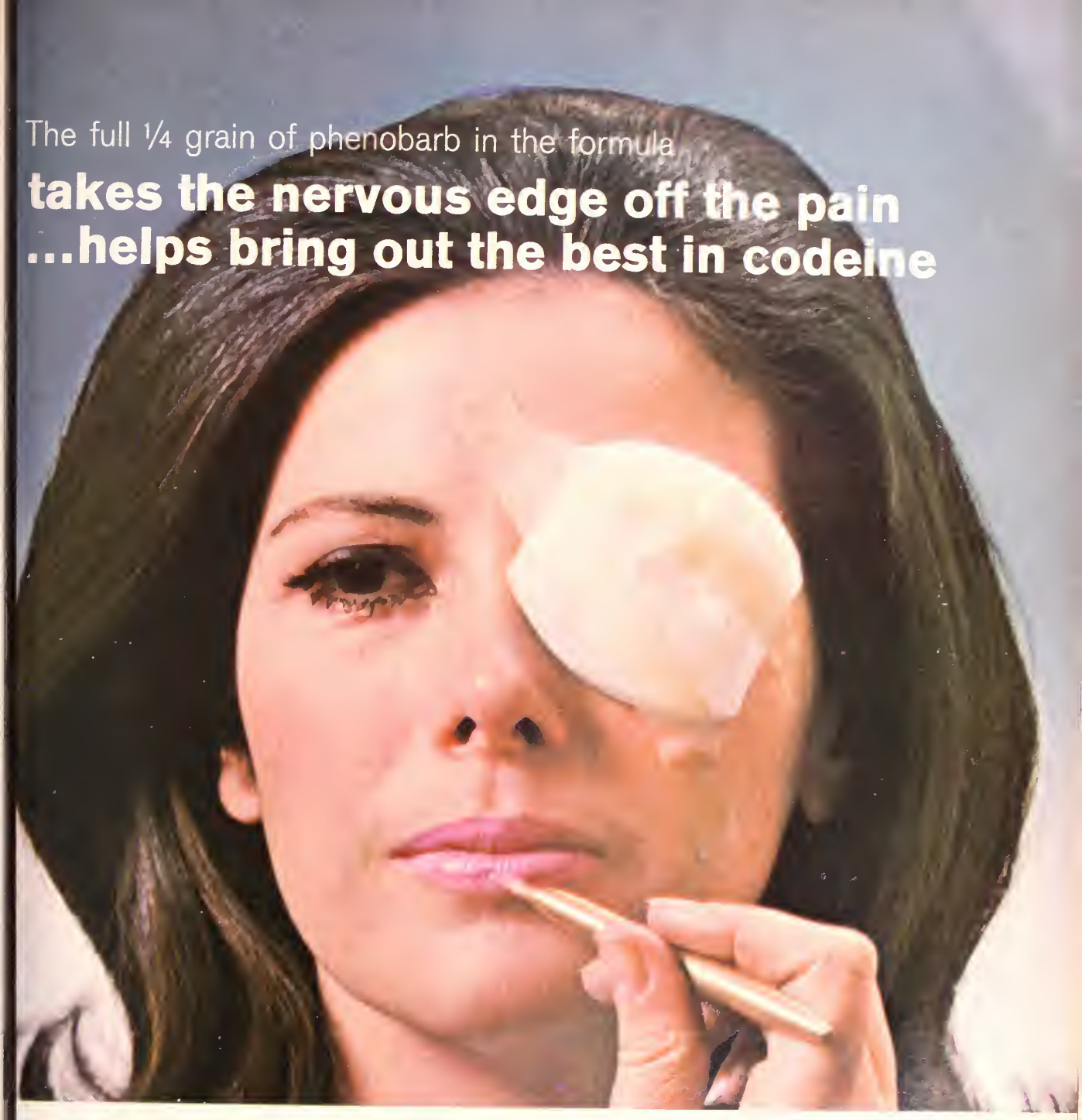


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(Warning: may be habit forming)
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Phenacetin (3 gr.) .....194.0 mg.
Hyoscyamine sulfate .....0.031 mg.
Codeine phosphate.....¼ gr. (No. 2),
½ gr. (No. 3), 1 gr. (No. 4)
(Warning: may be habit forming)

Contraindications: Hypersensitivity to any ingredient.

Precautions: As with all phenacetin-containing products, avoid excessive or prolonged use.

Side Effects: Side effects are uncommon—nausea, constipation, and drowsiness have been reported.

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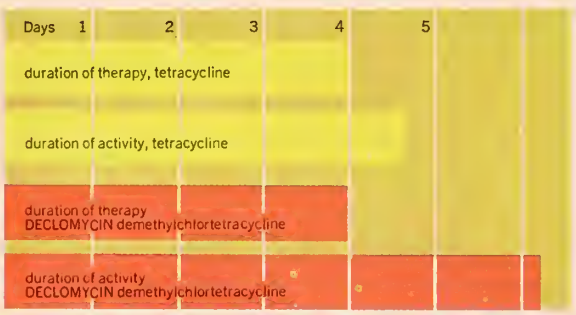
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DEMETHYLCHLORTETRACYCLINE

produces 1-2 "extra" days' activity



1-2 "extra" days' activity
after the last dose to protect against relapse

one 300 mg tablet b.i.d.
or
one 150 mg capsule q.i.d.

Effective in a wide range of everyday infections — respiratory, urinary tract and others — in the young and aged — the acutely or chronically ill — when the offending organisms are tetracycline-sensitive.

Contraindication — History of hypersensitivity to demethylchlortetracycline.

Warning — In renal impairment, usual doses may lead to excessive systemic accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort.

Precautions and Side Effects — Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. Use of demethylchlortetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect occurs mostly during long-term use but has also been observed in short treatment courses. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment. Side reactions include glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and dermatitis. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Anaphylactoid reactions have been reported.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products.

Capsules: 150 mg; *Tablets:* film coated, 300 mg, 150 mg, and 75 mg of demethylchlortetracycline HCl.

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  Metamucil absorbs water and creates a soft, pliant fecal mass which is demulcent to mucosal surfaces.

- **Relieves irritation...**

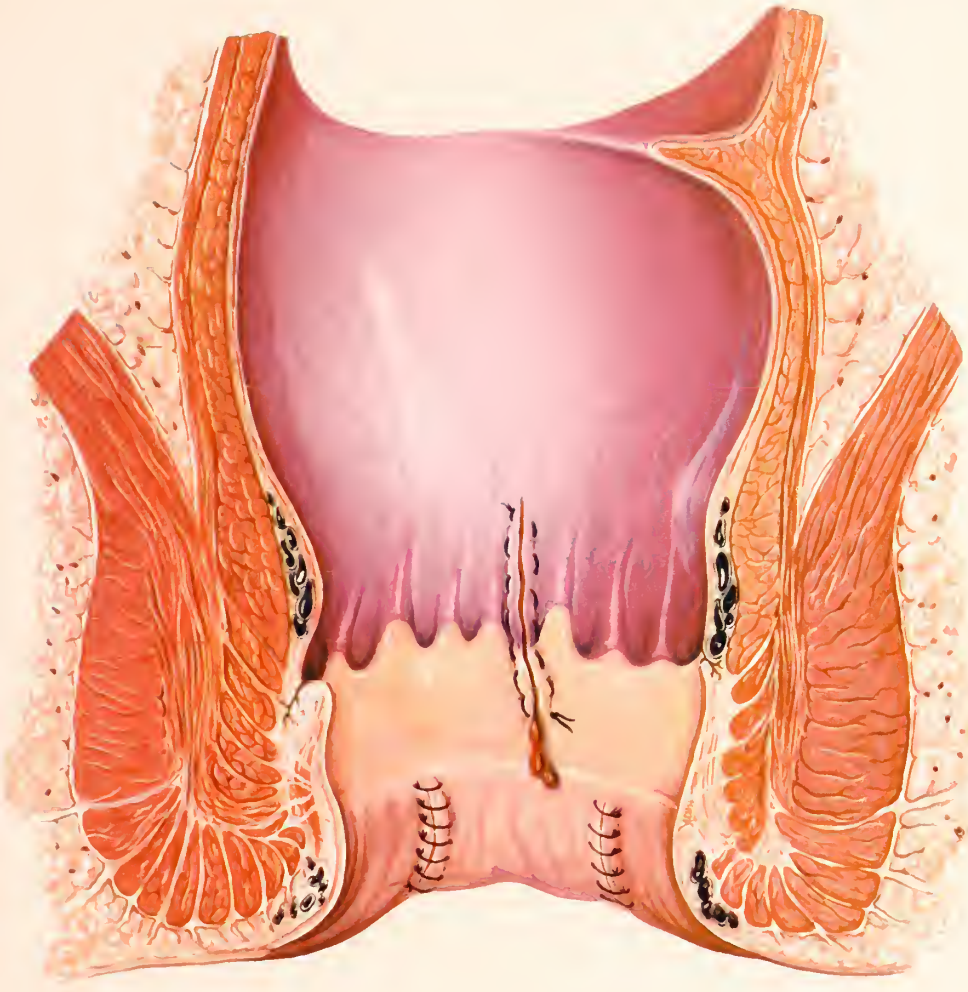
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- **And in nonsurgical conditions...**

  Metamucil minimizes both the pressure of strain on perineal structures and the physical irritation of hard masses on local lesions.



Usual Adult Dosage:

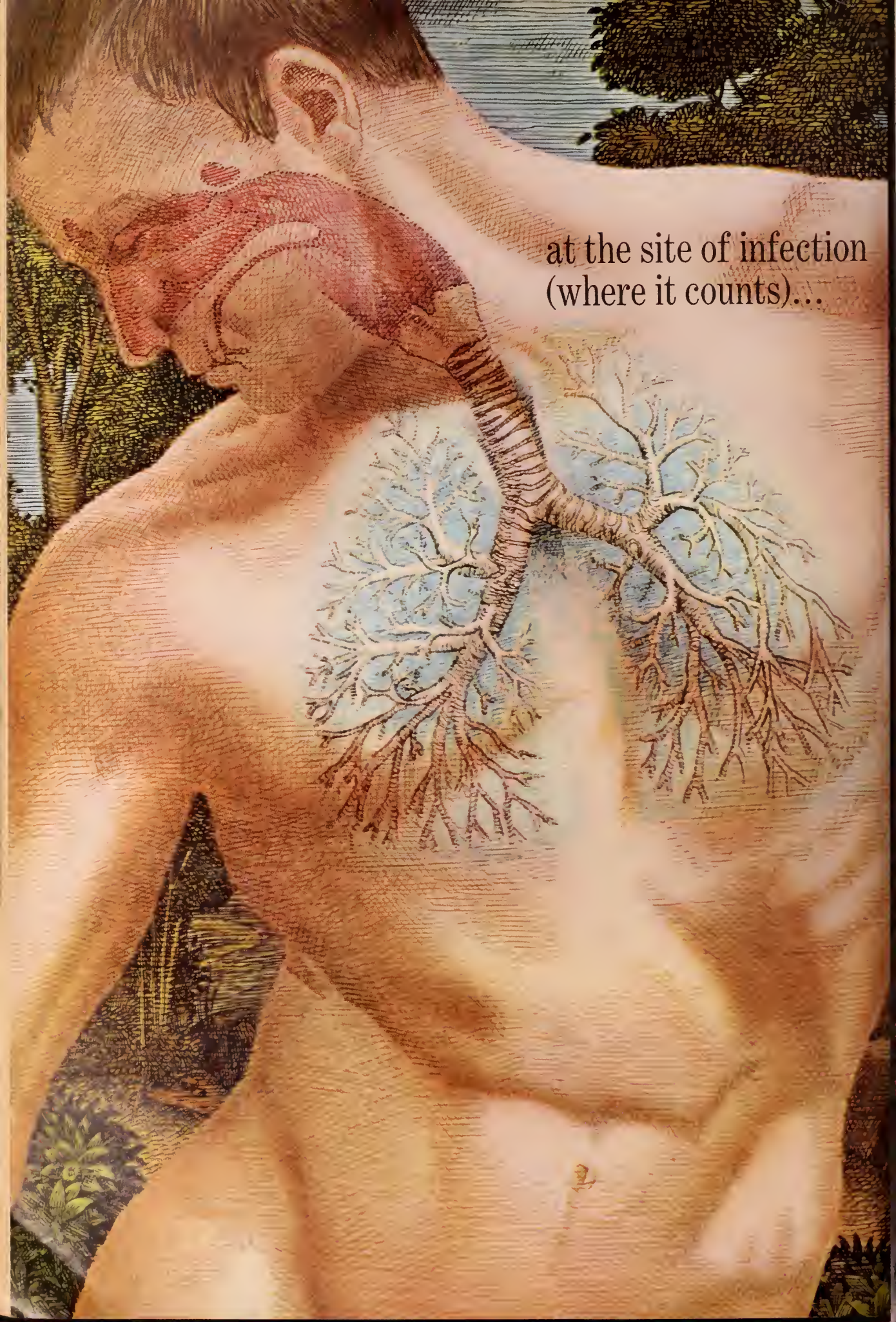
One rounded teaspoonful of Metamucil powder in a glass of cool liquid, or one packet of Instant Mix Metamucil in a glass of water. An additional glass of liquid is helpful.

Metamucil powder contains equal amounts of refined, purified psyllium and dextrose furnishing 14 calories and a negligible amount of sodium in each dose; available in containers of 4, 8 and 16 ounces.

Instant Mix Metamucil furnishes 3 calories and 0.25 Gm. of sodium in each dose; available in cartons of 16 and 30 single-dose packets.

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at the site of infection
(where it counts)...

Ilosone® provides more antibacterial activity than any other oral erythromycin

Acid stable, better absorbed ... Ilosone produces faster, higher, more prolonged blood levels, even in the presence of food[1-3]

Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.[1,2] Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.[1,3]

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

700121

Ilosone®

Lilly

Erythromycin Estolate

(See next page for prescribing information.)

Ilosone®/ the most active oral form of erythromycin

Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci on culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone.

Contraindications: Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with preexisting liver disease or dysfunction.

Side-Effects: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have appeared in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly if the drug is readministered to sensitive patients, usually within forty-eight hours. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to be definitely related to use of the drug, laboratory findings w characterized by increased direct-reacting bilirubin, eleva alkaline phosphatase levels, negative or weakly positive ceph flocculation and thymol turbidity tests, elevated serum gluta oxalacetic transaminase levels, peripheral eosinophilia, and n mal cholecystograms.

Individual idiosyncrasy seems evident since jaundice has been reported in other patients taking prolonged courses of medication. Patients with chronic infection have been given to 2 Gm. of the drug daily for periods of two to six months, patients with rheumatic fever have taken prophylactic dose 0.5 Gm. daily for two years without difficulty. In one group 144 patients who received the drug daily for two years, no ja dice was noted. It was of interest that members of six of th patients' families, who were not taking the drug, had episo of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels w determined in a group of fifty-four adults and children who t 250 mg. of Ilosone daily for an average of sixteen months rheumatic fever prophylaxis. The results were compared w those of a similar group of forty-four patients who received p icillin. There were no cases of jaundice in either group. Elevat of SGPT and serum alkaline phosphatase levels during the cou of treatment was observed in one patient treated with Ilos and in two patients treated with penicillin. Seven other patie in the group receiving Ilosone and four others in the penici group showed elevations in one of the tests at some time dur administration of the drugs.

Very satisfactory therapeutic results, without toxicity, w reported in 102 pediatric patients who received short-term (t day) courses of Ilosone in the treatment of streptococcus inf tions. Results of liver function tests in these patients were c parable to those in a similar control group who had recei penicillin.

Gastro-intestinal disturbances not associated with hepatic fects are observed in a small proportion of individuals as a re of a local stimulating effect of the medication on the aliment tract; however, the normal intestinal gram-negative bacte flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with the of erythromycin, there have been occasional reports of urtica skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally.

Ilosone Pulvules®
Ilosone Chewable Tablets
Ilosone Drops
Ilosone, 125, for Oral Suspension

For infants and for children under twenty-five pounds of b weight, the usual dosage is 5 mg. per pound every six hours; children twenty-five to fifty pounds, 125 mg. every six hou (Tablets Ilosone Chewable should be chewed or crushed swallowed with water.)

For adults and for children over fifty pounds, the usual dos of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythromy therapy should be considered.

In the treatment of syphilis, the recommended total dosag 20 to 30 Gm. given in divided doses for a period of ten to fift days. Close follow-up of the patient is necessary since eryth mycin drugs have not had adequate evaluation in all stages syphilis. Examinations of spinal fluid are recommended as p of the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four days recommended.[2] In the treatment of gonorrhea, patients wit suspected lesion of syphilis should have a dark-field examinat before receiving antibiotics, and monthly serologic tests sho be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and 250 m (equivalent to base), in bottles of 24 and 100.

Tablets Ilosone Chewable, N.F., 125 mg. (equivalent to bas in bottles of 50.

Ilosone Drops, 5 mg. (equivalent to base) per drop, in 10-c size packages, with dropper calibrated at 25 and 50 mg.

Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equivale to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size packag

References: 1. Griffith, R. S., and Black, H. R.: Am. J. M. Sc., *247*:69, 19
2. Griffith, R. S., and Black, H. R.: Antibiotics & Chemother., *12*:398, 19
3. Hirsch, H. A., Pryles, C. V., and Finland, M.: Am. J. M. Sc., *239*:198, 1960

Additional information available to physicians upon request.
Eli Lilly and Company, Indianapolis, Indiana 46206.

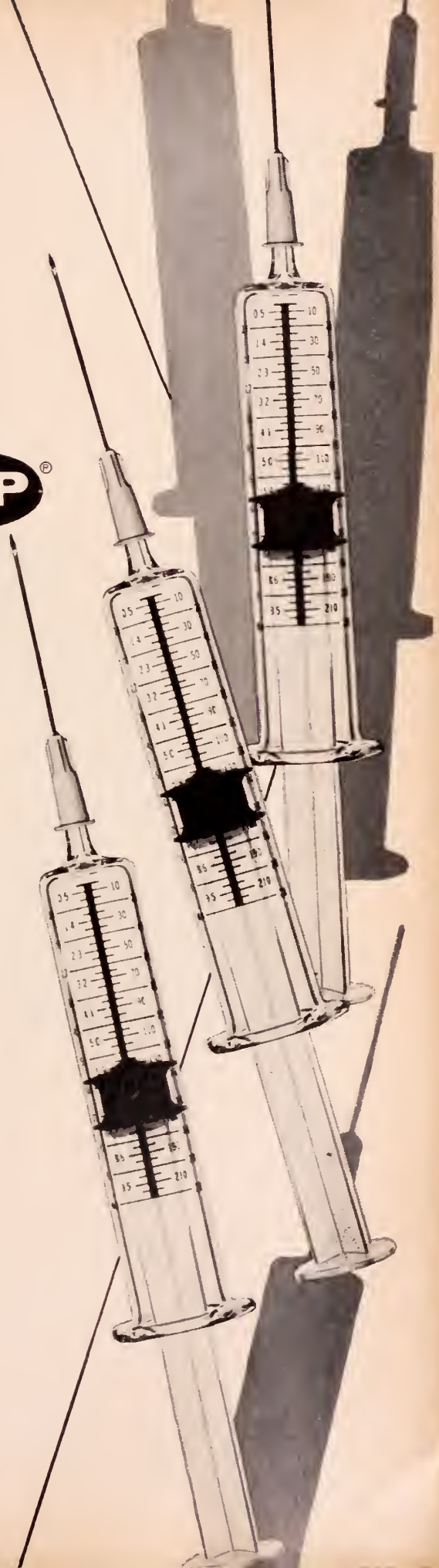
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Consider starting your hypertensives on this basic thiazide

ABBOTT

Enduron eliminates sodium around the clock, yet is relatively sparing of potassium

Enduron is a true 24-hour single-dose thiazide. Its sodium excretion is not squeezed into an abrupt peak during the first several hours. It is well-sustained in a plateau-like effect — with little reduction in intensity during the first 12 hours, and decline thereafter only gradual.

Potassium loss, in contrast, reaches an early minor peak. Then it subsides rapidly. Moreover, doses larger than 5 mg. have little added effect on potassium. Thus doubling the dose from 5 to 10 mg. approximately doubles sodium excretion—yet increases potassium loss little or none.

Use Enduron once a day as an ideal starting therapy in mild hypertension. Use it, too, as a basic therapeutic building block with which other agents can be joined, for managing your more resistant hypertensives.

Once a day, every day

ENDURON®
METHYCLOTHIAZIDE



DAILY DOSAGE RANGE	Minimum	Usual	Intermediate	Maximum
	2.5 mg. tablet	5 mg. tablet	7.5 mg.	10 mg.

See Brief Summary on final page of advertisement.

To build added response, shift to Enduronyl

ABBOTT

The deserpidine component compares favorably to reserpine, but with reduced side effects

The rauwolfia component of Enduronyl is deserpidine (Harmonyl®), a purified crystalline alkaloid. It is comparable to reserpine in its antihypertensive and tranquilizing activity. Yet it produces less tendency toward typical rauwolfia side effects such as drowsiness, lethargy, stuffy nose, depression, etc.

Patient acceptance has been excellent.

Enduronyl comes in two strengths: regular and Forte. Both provide 5 mg. of Enduron. The variation is where most needed: in the deserpidine. These scored tablets give a surprisingly flexible choice of doses (see below).

Use Enduronyl for your patients within the broad range of mild to moderate hypertension. Dosage is *once* a day: this means Enduronyl will generally cost patients less than equivalent drugs taken two or three times daily.

Once a day, every day

ENDURONYL®

METHYCLOTHIAZIDE 5 MG. WITH DESERPIDINE 0.25 MG.

ENDURONYL FORTE

METHYCLOTHIAZIDE 5 MG. WITH DESERPIDINE 0.5 MG.



	Minimum	Usual	Intermediate	Maximum
DAILY DOSAGE RANGE	2.5 mg. methyclothiazide 0.125 mg. deserpidine	5 mg. methyclothiazide 0.25 mg. deserpidine	7.5 mg. methyclothiazide 0.375 mg. deserpidine	10 mg. methyclothiazide 0.5 mg. deserpidine
DAILY DOSAGE RANGE	2.5 mg. methyclothiazide 0.25 mg. deserpidine	5 mg. methyclothiazide 0.5 mg. deserpidine	7.5 mg. methyclothiazide 0.75 mg. deserpidine	10 mg. methyclothiazide 1 mg. deserpidine

See Brief Summary on final page of advertisement.

704075

Eutonyl affords a different kind of basic therapy for moderate to severe cases

ABBOTT

Effect tied to reduced peripheral vascular resistance; no central depressant action

Eutonyl is a unique nonhydrazine agent. It is reported to act by reducing peripheral vascular resistance, with little or no effect upon cardiac output.[1,2]

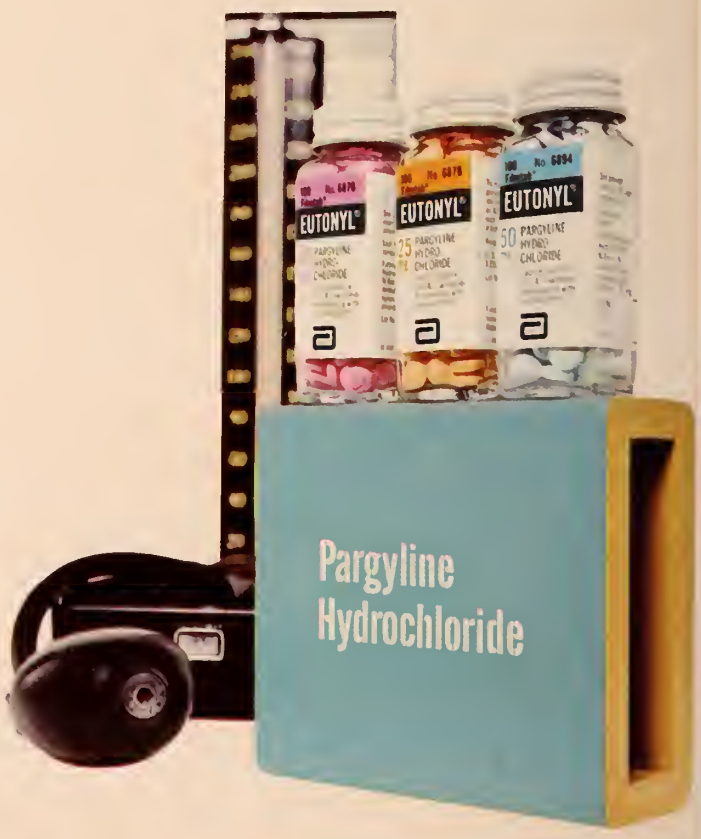
In clinical trials, significant reductions in mean blood pressure were seen in 84% of patients studied — including some unusually difficult cases. Eutonyl lowers diastolic in proportion to systolic, and in half of the cases studied, reductions in the sitting and recumbent positions were nearly as great as in the standing position.

Most important: There is no central depressant action. In fact, many patients reported an *increased* sense of well being.

Here, then, is a highly effective *basic treatment* for moderate to severe cases—and one that will not hamper your patient with lethargy or drowsiness while on treatment.

Once a day, every day

EUTONYL®
PARGYLINE HYDROCHLORIDE



DAILY DOSAGE RANGE	Minimum	Usual starting	Intermediate	Maximum
	10 mg. tablet	25 mg. tablet	50 mg. tablet or as needed	200 mg.

1. Brest, A. N., et al., Cardiac and Renal Hemodynamic Response to Pargyline, Ann. N. Y. Acad. Sci., 107-1016, 1963.
2. Winsor, T., Pargyline Hydrochloride, Hypertension, Urinary Tryptamine, and Vascular Reflexes, Geriatrics, 19:598, Aug., 1964.

See Brief Summary on final page of advertisement.

Eutron adds thiazide for enhanced therapy with milder side effects

ABBOTT

Only a 7/4 mm. span between standing and recumbent pressures—reduced chance of orthastatic hypotension

The combining of Eutonyl and Enduron in Eutron permits a significantly greater antihypertensive effect than with either agent used alone. This in turn may allow therapeutic success with lesser dosage—and correspondingly milder side effects.

Indeed, fully 94.5% of all patients studied during clinical trials continued on therapy uninterrupted by side effects.

Most striking was the drug's action in lowering blood pressure to *nearly equal levels in all body positions*. Total average spread between standing and recumbent readings (after treatment) was only 7/4 mm. Hg.

Thus, in your moderate to severe cases, Eutron affords a usually smooth course of therapy, with reduced likelihood of orthostatic effects. And, because of the thiazide component, Eutron may be used in the presence of congestive heart failure.

Once a day, every day

EUTRON™

PARGYLINE HYDROCHLORIDE 25 MG.
WITH METHYCLOTHIAZIDE 5 MG.





DAILY DOSAGE RANGE	Minimum	Usual starting	Intermediate	Maximum
	12.5 mg. pargyline hydrochloride and 2.5 mg. methyclothiazide	25 mg. pargyline hydrochloride and 5 mg. methyclothiazide	37.5 mg. pargyline hydrochloride and 7.5 mg. methyclothiazide	50 mg. pargyline hydrochloride and 10 mg. methyclothiazide

See Brief Summary on final page of advertisement.

TM—Trademark

704075

ENDURON®

METHYCLOTHIAZIDE

ENDURONYL®

Each tablet contains Methyclothiazide 5 mg. with Deserpidine 0.25 mg. or 0.5 mg.

Indications: Enduron is used to control edema and mild hypertension. Also used with other drugs for hypertension. Enduronyl is used in mild to moderately severe hypertension.

Contraindications: Neither Enduron nor Enduronyl should be used in severe renal disease (except nephrosis) or shutdown; in severe hepatic disease or impending hepatic coma; in patients sensitive to thiazides. Enduronyl is contraindicated in severe mental depression, active peptic ulcer, and ulcerative colitis.

Warnings: Consider possible sensitivity reactions in patients with a history of allergy or asthma. Avoid use of enteric-coated potassium tablets, as these may induce serious or fatal small bowel lesions; if added potassium intake is desired, dietary supplementation is recommended. Coated potassium tablets should be reserved for cautious use when adequate dietary supplementation is impractical.

Precautions and Adverse Reactions: Use thiazides with caution in severe renal dysfunction. Caution is also necessary with impaired hepatic function or progressive liver disease. During intensive or prolonged thiazide therapy, watch chloride and potassium levels (especially the latter if patient is on digitalis). In surgical patients, thiazides may alter response to vasopressors and tubocurarine. Use thiazides with caution in pregnancy (bone marrow depression, thrombocytopenia, or altered carbohydrate metabolism are possible in certain newborn). Occasional thiazide side effects also include blood dyscrasias; elevations of BUN, serum uric acid, or blood sugar; electrolyte imbalance, g.i. disturbances, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, pancreatitis, and gout.

Use Enduronyl with caution in patients with a history of peptic ulcer, as rauwolfias may increase gastric secretion. Discontinue at the first sign of mental depression. Rauwolfias may increase hypotensive effects of surgery or anesthesia, and are best discontinued two weeks prior. They also lower the convulsive threshold in epilepsy. Other possible rauwolfia side effects include drowsiness, nasal stuffiness, nausea, weight gain, and diarrhea. Less frequent complications of deserpidine therapy are aggravation of peptic ulcer, epistaxis, and skin eruption. Alcohol, barbiturates or narcotics may potentiate action of deserpidine.

EUTONYL®

PARGYLINE HYDROCHLORIDE

EUTRON™

Each tablet contains Pargyline Hydrochloride 25 mg. [illegible]clothiazide 5 mg.

Indications: For treatment of patients with moderate to severe hypertension, especially those with severe diastolic hypertension. Not recommended for use in patients with mild or labile hypertension amenable to therapy with sedatives and/or thiazide diuretics alone.

Contraindications: Pheochromocytoma, advanced renal disease, paranoid schizophrenia and hyperthyroidism. Until further experience is gained, not recommended for use in patients with malignant hypertension, children under 12, or pregnant patients.

Concomitant use of the following is contraindicated: other monoamine oxidase inhibitors; parenteral forms of reserpine or guanethidine; sympathomimetic drugs; foods high in tyramine such as cheese; imipramine and amitriptyline, or similar antidepressants; methyldopa. Interval of two weeks should separate therapy and use of these agents.

Warnings: Pargyline hydrochloride is a monoamine oxidase inhibitor. Warn patients against eating cheese, and using alcohol, proprietary drugs or other medication without the knowledge of the physician. When necessary to administer alcohol, narcotics (meperidine should be avoided), antihistamines, anesthetics, barbiturates, chloral hydrate and other hypnotics, sedatives, tranquilizers, or caffeine, these can be used cautiously at a dosage of ¼ to 1/5 the usual amount. Adjust dose of anesthetic agents to response of patient. Avoid parenteral administration where possible. Withdraw pargyline two weeks before elective surgery.

Warn patients about the possibility of postural hypotension. Those with angina or other evidence of coronary disease should not increase physical activity. Pargyline may lower blood sugar. Avoid use of enteric-coated potassium tablets, as these may induce serious or fatal small-bowel lesions; if added potassium intake is desired, dietary supplementation is recommended. Coated potassium tablets should be reserved for cautious use when adequate dietary supplementation is impractical.

Precautions: Measure blood pressure while patient is standing to determine antihypertensive effect. Use with caution in hyperactive or hyperexcitable persons. Such persons may show increased restlessness and agitation. Withdraw drug during acute febrile illness. Watch patients with impaired renal function for increasing drug effects or elevation of BUN and other evidence of progressive renal failure; withdraw drug if such alterations persist and progress. Use with caution in patients with liver dysfunction or progressive liver disease. As with all new drugs, complete blood counts, urinalyses, and liver function tests should be performed periodically. With prolonged therapy, examine patients for change in color perception, visual fields, and fundi.

During intensive or prolonged methyclothiazide therapy, watch chloride and potassium levels (especially latter if patient is on digitalis). Methyclothiazide also may reduce arterial response to pressor amines. Use thiazides with caution in pregnancy (bone marrow depression, thrombocytopenia, or altered carbohydrate metabolism are possible in certain newborns). Thiazide drugs may increase responsiveness to tubocurarine.

Side Effects: Pargyline may be associated with orthostatic hypotension. Mild constipation, slight edema, dry mouth, sweating, increased appetite, arthralgia, nausea and vomiting, headache, insomnia, difficulty in micturition, nightmares, impotence, delayed ejaculation, rash, and purpura have been encountered with pargyline. Hyperexcitability, increased neuromuscular activity (muscle twitching) and other extra-pyramidal symptoms have been reported. Drug fever is extremely rare. Congestive heart failure has been reported in a few patients with reduced cardiac reserve.

Thiazide side effects also include blood dyscrasias, elevation of BUN, serum uric acid, or blood sugar, electrolyte imbalance, g.i. disturbances, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, pancreatitis, and gout. Nocturia has been observed with the combination.

704075

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...can be rough when epidemics of nausea and vomiting strike a family. Emetrol offers prompt, safe relief. It is free from toxicity[1] or side effects[2,3] and will not mask symptoms of serious organic disorders.

1. Bradley, J. E., *et al.*: J. Pediat. *38*:41 (Jan.) 1951.
2. Bradley, J. E.: Mod. Med. *20*:71 (Oct. 15) 1952.
3. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. *65*:311 (Feb.) 1953.



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"Livingston, vertigo is my doom!"
Cried Stanley in his doctor's room





Said the doc, "For your ills
I've got just the pills"



Said Stan,
"Antivert, I presume."

Antivert® tablets/syrup Roerig stops vertigo
(meclizine HCl, niacin)

Tablets: (meclizine HCl 12.5 mg. and niacin 50 mg.) Syrup: (each 5 cc. teaspoonful contains meclizine HCl 6.25 mg. and niacin 25 mg.)

Most widely prescribed anti-vertigo agent[1]
Complete to moderate relief of symptoms in 9 out of 10 patients[2]

Antivert, the leading anti-vertigo product,[1] combines meclizine HCl, an outstanding drug for treatment of vestibular dysfunction, with niacin, a drug of choice for prompt vasodilation. Prescribe Antivert for your patients with vertigo, Meniere's syndrome and allied disorders.

Precautions and contraindications: Frequent, short-lived reactions include: cutaneous flushing, sensations of warmth, tingling and itching, burning of skin, increased gastrointestinal motility, and sebaceous gland activity. In explaining these reactions to the patient, it is suggested that they be regarded as a desirable physiological sign that the niacin is carrying out its intended function of vasodilation. Because of this vasodilation, severe hypotension and hemorrhage are obvious contraindications to Antivert therapy. Although the incidence of drowsiness and other atropine-like side effects such as dry mouth and blurring of vision is low, the physician should alert the patient to the need for due precautions when engaging in activities where alertness is mandatory. **Use in women of childbearing age:** A review of available animal data reveals that meclizine exerts a teratogenic response in the rat. In one study a dose of 50 mg./kg./day (50 times the maximum recommended human dose) produced cleft palate in 2 of 87 fetuses when administered to the rat at critical times during the first 15 days of gestation. At doses of 125 mg./kg./day, meclizine will produce 100% incidence of cleft palate in the rat. At doses of 25 mg./kg./day, decreased calcification of the vertebrae and relative shortening of the limbs were also produced in the rat, but experts disagree as to whether this is a teratogenic response. While available clinical data are inconclusive, scientific experts are of the opinion that this drug may possess a potential for adverse effects on the human fetus. Consequently, consideration should be given to initial use of a nonphenothiazine agent that is not suspected of having a teratogenic potential. In any case, the dosage and duration of treatment should be kept to a minimum. **Dosage:** One tablet or one to two teaspoonfuls (5-10 cc.) t.i.d. just before meals. Specific requirements for individual patients should be determined by the physician. **Supplied:** Tablets in bottles of 100 and 500. Syrup in pint bottles. RX only.

References: 1. Based on 1966 data from independent physicians' market survey organization. 2. Scal, J. C.: Eye Ear Nose & Throat Month. **38**:738 (Sept.) 1959.

Neobon®
geriatric ♀+♂ supplement
helps keep them 'on the go'

Each capsule contains:

(1) **Vitamins and Minerals**	
Vitamin A (acetate)	2000 U.S.P. units
Vitamin D (ergocalciferol, U.S.P.)	200 U.S.P. units
Vitamin B_1 (thiamine mononitrate, U.S.P.)	0.5 mg.
Vitamin B_2 (riboflavin, U.S.P.)	0.5 mg.
Vitamin B_6 (pyridoxine HCl, U.S.P.)	0.5 mg.
Niacinamide, U.S.P.	50 mg.
Calcium pantothenate, U.S.P.	5 mg.
Vitamin E (dl-alpha tocopheryl acetate)	5 I.U.
Rutin	5 mg.
Cobalt (from cobalt sulfate)	0.033 mg.
Molybdenum (from sodium molybdate)	0.066 mg.
Copper (from copper sulfate)	0.33 mg.
Manganese (from manganese sulfate)	0.33 mg.
Magnesium (from magnesium sulfate)	2 mg.
Iodine (from potassium iodide)	0.05 mg.
Potassium (from potassium sulfate)	1.66 mg.
Zinc (from zinc sulfate)	0.4 mg.
(2) **Hematopoietic Factors**	
Iron (from ferrous sulfate)	3.40 mg.
Vitamin B_{12} (cobalamin concentrate, N.F., as Stablets*)	1 mcg.
Vitamin C (ascorbic acid, U.S.P.)	50 mg.
(3) **Digestive Enzyme**	
Pancreatic substance	50 mg.
(4) **Gonadal Hormones**	
Methyltestosterone, N.F.	1.0 mg.
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For older adults who require it, daily supplementation with Neobon can help overcome decreases in endogenous gonadal hormone production, as well as deficiencies of iron, vitamins and other nutritional factors. In a single convenient capsule, Neobon provides vitamins, minerals, gonadal hormones, hematopoietic factors, digestive enzymes, and amino acids—all selected for adjunctive therapeutic value in the geriatric syndrome. For example, one of the gonadal hormones in Neobon is ethinyl estradiol. It is more slowly metabolized in the body than natural estrogens or their esters.

Precautions: Contraindicated in patients in whom estrogen or androgen therapy should not be used, as in carcinoma of the breast or prostate.

Dosage: One capsule, t.i.d. with meals, or as directed by physician.

Supplied: Bottles of 60 capsules. Rx only.

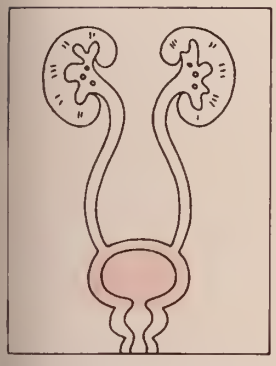
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The battle with bacteria: cystitis

Artist's conception of cystoscopic view of bladder showing congested blood vessels and edema around ureteral orifice.



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Generally uncomplicated therapy enhances the favorable clinical results... Of the total 686 patients from the studies cited,[1-6] only three discontinued therapy because of side effects. Most of the side effects reported (approximately 3%) were mild and included nausea and/or vomiting, skin rash, dizziness, headache, gastritis, generalized uneasiness and itching.[1-6]

1. Peters, J. H.: *J. Urol.*, *87*:747, 1962. 2. Draper, J. W., *et al.*: *South. M. J.*, *57*:920, 1964. 3. Stewart, B. L.: *J. Urol.*, *87*:491, 1962. 4. Hagstrom, R. S.: *Rocky Mountain M. J.*, 59:(2), 37, 1962. 5. Arnold, J. H.: *Clin. Med.*, *71*:552, 1964. 6. Nelson, C. G.: *Colorado GP*, *3*:(3), 2, 1961.

Before prescribing, please consult complete product information, a summary of which follows:

Contraindicated in sulfonamide-sensitive patients, pregnant females at term, premature infants, or newborn infants during first three months of life.

Warnings: Use only after critical appraisal in patients with liver damage, renal damage, urinary obstruction or blood dyscrasias. If toxic or hypersensitivity reactions or blood dyscrasias occur, discontinue therapy. In intermittent or prolonged therapy, blood counts and liver and kidney function tests should be performed.

Precautions: Observe usual sulfonamide therapy precautions, including maintenance of an adequate fluid intake. Use with caution in patients with histories of allergies and/or asthma. Patients with impaired renal function should be followed closely since renal impairment may cause excessive drug accumulation. Occasional failures may occur due to resistant microorganisms. Not effective in virus or rickettsial infections.

Adverse Reactions: Headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, Stevens-Johnson syndrome, injection of the conjunctiva and sclera, petechiae, purpura, hematuria or crystalluria may occur, in which case the dosage should be decreased or the drug withdrawn.

Dosage: Adults—4 tablets initially, then 2 tablets b.i.d. or t.i.d. depending upon severity of infection. Children—1 tablet/20 lbs initially, followed by ½ tablet/20 lbs b.i.d.

How Supplied: Tablets, 0.5 Gm, bottles of 50.

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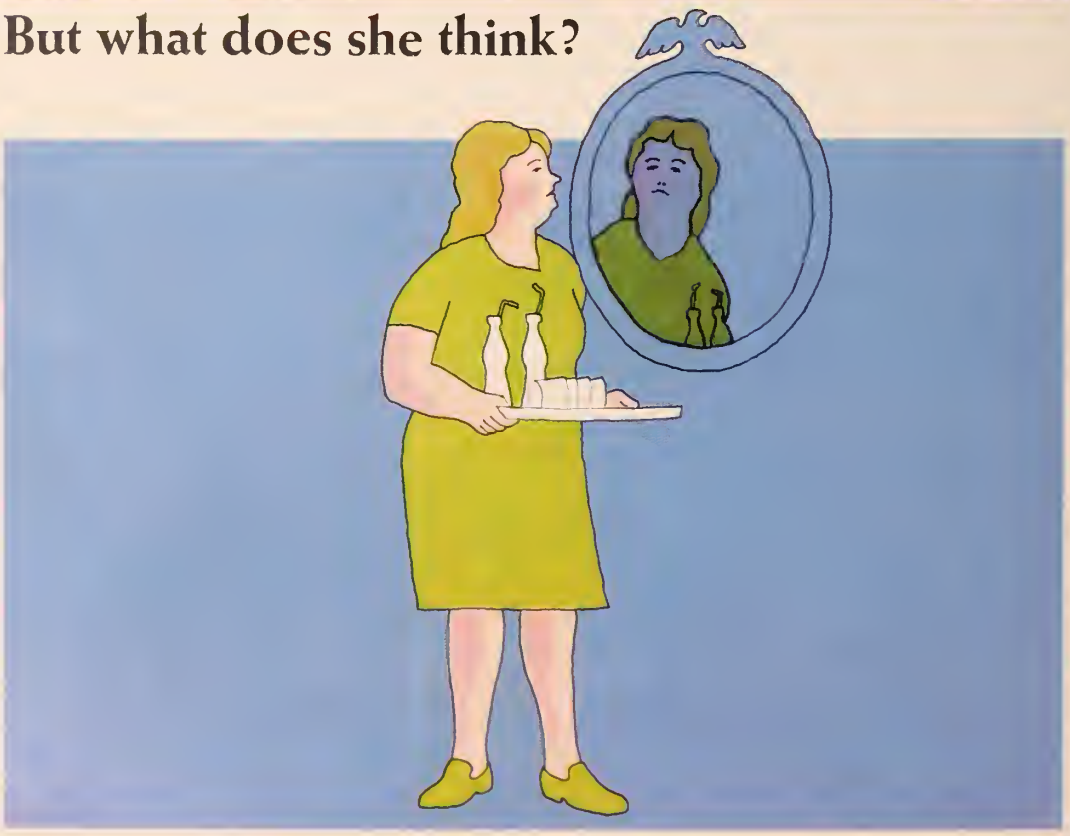
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Precautions: Use with coutian in patients hypersensitive to sympathamimetic compaunds, who have caranary or cardiavascular diseose, or are severely hypertensive.

Dextra-amphetamine sulfate: Excessive use by unstable individuals may result in psychalagical dependence.

Meprobamate: Careful supervisian af dose ond amaunts prescribed is advised, especially far patients with knawn prapensity far taking excessive quantities af drugs. Excessive and pralonged use in susceptible persons, e.g. alcohalics, farmer addicts, and ather severe psychaneurotics, has been reparted ta result in dependence an the drug. Where excessive dosage has cantinued far weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence af preexisting symptams such as anxiety, anorexia, ar insamnia; ar withdrawal reactians such as vamiting, ataxia, tremars, muscle twitching and, rarely, epileptiform seizures. Should meprabamate cause drowsiness ar visual disturbances, reduce dasage and avaid aperatian af motar vehicles, machinery or other activity requiring alertness. Effects of excessive alcahal consumptian may be increased by meprabamate. Apprapriote caution is recammended with patients prane to excessive drinking. In patients prane ta bath petit and grand mal epilepsy meprabamate may precipitate grand mal attacks. Prescribe cautiausly and in small quantities ta patients with suicidal tendencies.

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Meprobamate: Drawsiness may accur and can be assaciated with ataxia; the symptam can usually be cantralled by decreasing the dase, ar by cancamitant administratian af central stimulants. Allergic ar idiosyncratic reactians: maculapapular rash, acute nonthrombacytapenic purpura with petechiae, ecchymases, peripheral edema and fever, transient leukapenia. A case af fatal bullaus dermatitis, fallawing administratian af meprabamate and prednisolone, has been reparted. Hypersensitivity has praduced fever, fainting spells, angianeuratic edema, bronchial spasms, hypatensive crises (1 fatal case), anuria, stamatitis, practitis (1 case), anaphylaxis, agranulacytasis and thrambacytapenic purpura, and a fatal instance af aplastic anemia, but anly when other drugs known to elicit these conditions were given cancomitantly. Fast EEG activity, usually after excessive dasage. Impairment af visual accammadatian. Massive averdasage may praduce drawsiness lethargy, stupar, ataxia, cama, shack, vasomotar and respiratary callapse.

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She simply sits while the party goes on around her, already used to being the girl who is left out. She tries to lose weight—but her emotions won't let her. She becomes irritable and depressed when she doesn't eat, and anxious when she considers her future. So each time she gives up.

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BRIEF SUMMARY / *Indications:* Ambar suppresses appet and helps offset emotional reactions to dieting. *Side Effec* Nervousness or excitement occasionally noted, but usua infrequent at recommended dosages. Slight drowsiness h been reported rarely. *Precautions:* Administer with cauti in the presence of cardiovascular disease or hypertensi *Contraindications:* Hypersensitivity to barbiturates or sy pathomimetics; patients with advanced renal or hepa disease. See package insert for further details.



New view of an oral contraceptive at work

Although suppression of ovulation remains the primary mode of action of oral contraceptives, newer knowledge indicates that products like Norinyl-1 – which provide the combined action of both low-dosage progestogen and estrogen for the full treatment cycle – offer multiple contraceptive action that helps explain their unexcelled record of effectiveness. This report explores the secondary protective mechanisms against unwanted pregnancy offered by combined hormonal administration and the importance of the progestational agent in making such multiple contraceptive action possible.

Accumulating evidence has indicated that sparse, highly viscous cervical mucus has an adverse effect on the motility and survival of spermatozoa.

The estrogen-opposing progestational ingredient of Norinyl-1 (norethindrone 1 mg. with mestranol 0.05 mg.) reverses the usual mid-cycle picture of a thin, watery cervical mucus. The result – a built-in barrier that inhibits sperm from reaching the ovum should one be released. The inset in the adjoining photograph shows immobile spermatozoa as they appear in cervical mucus taken from a patient treated with Norinyl-1.

See last page for contraindications, precautions, side effects and dosage.

How the estrogen-opposing action of Norinyl-1 creates a hostile cervical mucus

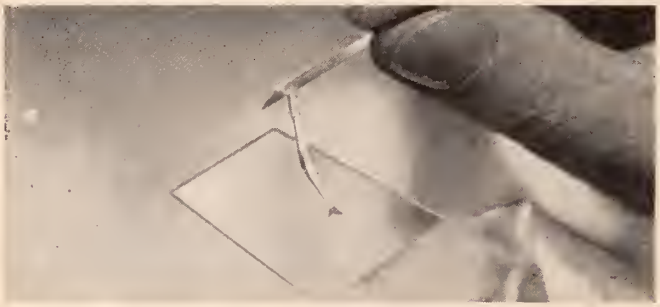
Normally estrogen activity during the fertile midcycle stimulates the production of cervical mucus. The mucus at this time is profuse and watery—allowing maximum sperm motility and promoting penetration.

But what happens when Norinyl-1 is administered? Its potent progestogen, norethindrone, opposes estrogen stimulation of cervical mucus. Consequently, the amount of mucus decreases and its viscosity increases. This results in a sparse but thick mucus barrier that diminishes the vitality of the sperm and impairs its powers of penetration.

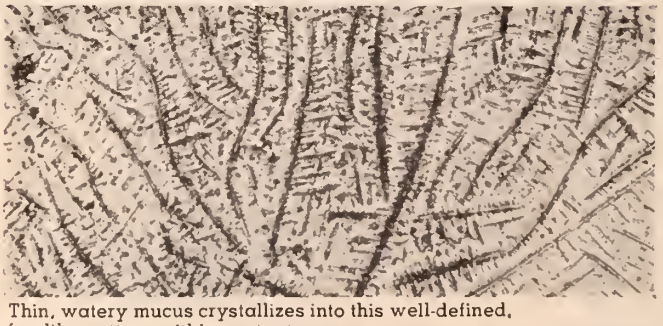
How hostile cervical mucus supports contraceptive action

The importance of these observations to the effectiveness of Norinyl-1 has been noted in a report on 89 patients taking this medication.* In all instances, cervical mucus obtained from cycle day 5 to cycle day 29 appeared scant and thick and exhibited little or no Spinnbarkeit. In the opinion of this investigator, the effect on cervical mucus may be sufficient to prevent conception. *Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965

Normal cervical mucus at midcycle in untreated patient permits sperm motility... promotes sperm penetration.



Cervical mucus is thin and watery with a stretchability (Spinnbarkeit) of 15 to 20 cm.



Thin, watery mucus crystallizes into this well-defined, fernlike pattern within a minute.

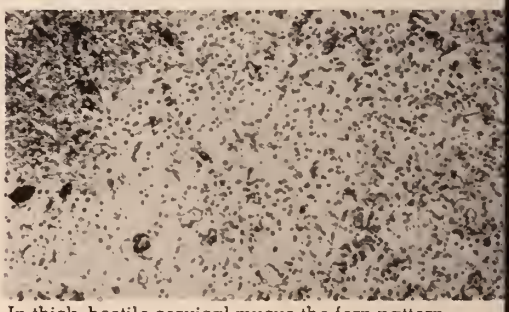


Spermatozoa appear healthy, are active and freemoving.

Hostile cervical mucus at midcycle produced by Norinyl-1 impairs sperm vitality... inhibits penetration.



Cervical mucus is scanty, thick and viscous. Spinnbarkeit is 1 cm. or less.



In thick, hostile cervical mucus the fern pattern is poorly defined or absent.



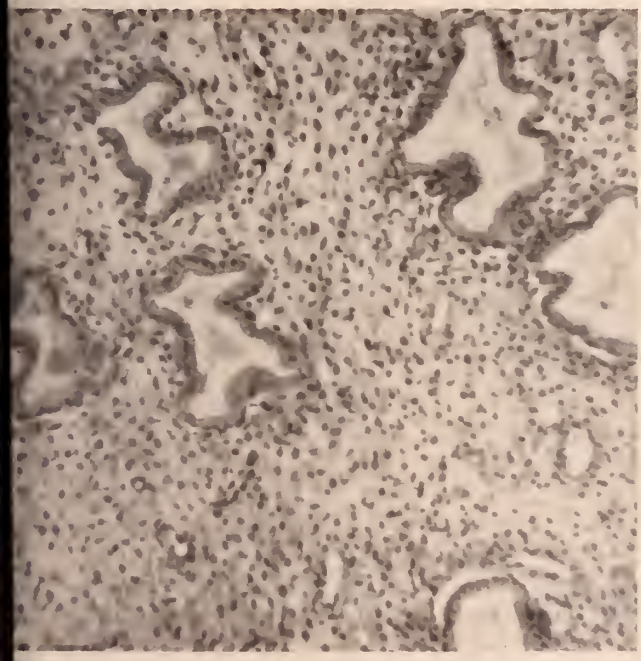
Immobile spermatozoa as they appear in cervical mu taken from a patient treated with Norinyl-1.

An endometrium unreceptive to nidation– another supporting contraceptive action of Norinyl-1

t us suppose that an ovum is released—as occurs in an casional, rare case—and somehow a sperm succeeds in netrating the cervical mucus barrier? Should this come about, e additional action of Norinyl-1 may protect the patient from wanted pregnancy—progestogen intake makes endometrial sue unreceptive to implantation.

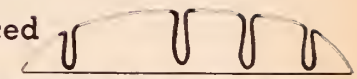
dometrium of treated patient

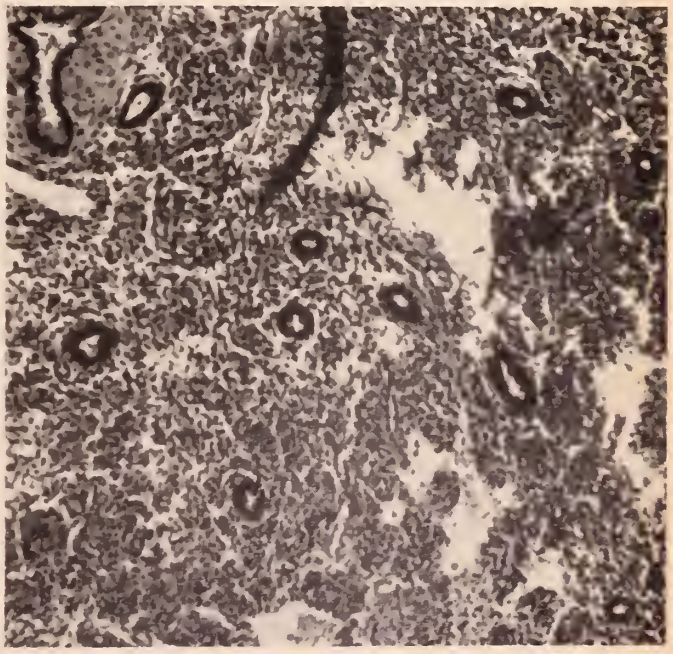




rmally the endometrium progresses through roliferative phase stimulated by estrogen and a retory phase stimulated by progesterone. ring the secretory phase the endometrium is ptive to the fertilized ovum.

Unreceptive endometrium produced by Norinyl-1





When Norinyl-1 is administered its progestogen component—norethindrone—accelerates the secretory phase, suppressing glandular development. From day 11 on, secretory action is no longer present. The result is that during the latter half of the cycle the endometrium becomes unreceptive to egg implantation.

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last page for contraindications, precautions, side effects and dosage.

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(norethindrone 1mg. c̄ mestranol 0.05mg.) tablets

Reduction of oral contraceptive dosage to lowest effective levels h become a well-accepted principle of conservative medical pract In keeping with this view, Norinyl is now available in a new stren in which *both* norethindrone and mestranol are reduced 50 perc Studies show that Norinyl-1 achieves fertility control with only 1 mg. of combined progestogen and estrogen per tablet.

Norethindrone was first reported for use as a progestational agent human beings in 1955. Norethindrone 2 mg. with mestranol 0.1 mg., an oral contraceptive, is currently in use by over 2,000,000 wom Clinical experience now establishes that Norinyl-1 also amply me the criteria of reliability and safety.*

*Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965.

PRESCRIBING INFORMATION

Contraindications: 1. Patients with thrombophlebitis or with a history of thrombophlebitis or pulmonary embolism. 2. Liver dysfunction or disease. 3. Patients with known or suspected carcinoma of the breast or genital organs. 4. Undiagnosed vaginal bleeding.

Warnings: 1. Discontinue medication pending examination if there is sudden partial or complete loss of vision or if there is a sudden onset of proptosis, diplopia, or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn. 2. Since the safety of Norinyl-1 in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods, pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule, the possibility of pregnancy should be considered at the time of the first missed period. 3. Detectable amounts of the active ingredients in oral contraceptives have been identified in the milk of mothers receiving these drugs. The significance of this dose to the infant has not been determined.

Precautions: 1. The pretreatment physical examination should include special reference to breast and pelvic organs, as well as a Papanicolaou smear. 2. Endocrine and possibly liver function tests may be affected by treatment with Norinyl-1. Therefore, if such tests are abnormal in a patient taking Norinyl-1, it is recommended that they be repeated after the drug has been withdrawn for 2 months. 3. Under the influence of estrogen-progestogen preparations, preexisting uterine fibroids may increase in size. 4. Because these agents may cause some degree of fluid retention, conditions that may be influenced by this factor, such as epilepsy, migraine, asthma, cardiac, or renal dysfunction, require careful observation. 5. Although a cause and effect relationship has not been established, Norinyl-1 should be used with caution in patients with a history of cerebrovascular accident. 6. In relation to breakthrough bleeding, as in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In cases of undiagnosed vaginal bleeding, adequate diagnostic measures are indicated. 7. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. 8. Any possible influence of prolonged Norinyl-1 therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. 9. A decrease in glucose tolerance has been observed in a small percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Norinyl-1 therapy. 10. Because of the occasional occurrence of thrombophlebitis and pulmonary embolism in patients taking oral contraceptives, the physician should be alert to the earliest manifestations of the disease. A cause and effect relationship has not been demonstrated. 11. Because of the effects of estrogens on epiphyseal closure, Norinyl-1 should be used judiciously in young patients in whom bone growth is not complete. 12. The age of the patient constitutes no absolute limiting factor, although treatment with Norinyl-1 may mask the onset of the climacteric. 13. The pathologist should be advised of Norinyl-1 therapy when relevant specimens are submitted.

Side Effects: The following adverse reactions have been observed with varying incidence in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms, breakthrough bleeding, spotting, change in menstrual flow, amenorrhea, edema, chloasma, breast changes (tenderness, enlargement and secretion), loss of scalp hair, change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately postpartum, cholestatic jaundice, erythema multiforme, erythema nodosum, hemorrhagic eruption, migraine, rash (allergic), itching, rise in blood pressure in susceptible individuals, mental depression.

The following occurrences have been observed in users of oral contraceptives. A cause and effect relationship has not been established: thrombophlebitis, pulmonary embolism, neuroocular lesions.

The following laboratory results may be altered by the use of oral contraceptives creased bromsulphalein retention and o hepatic function tests, coagulation tests crease in prothrombin, factors VII, VIII, IX X), thyroid function (increase in PBI and nol extractable protein-bound iodine and crease in T^3 values), metapyrone test, pregn diol determination.

Other side effects reported to have occu in association with use of this drug are ness, hirsutism, pains in legs, back, chest abdomen, dysuria, drowsiness, vaginal charge, libido increased and decreased, tions, hypermenorrhea, hypomenorr increased appetite, G.U. infections, vari veins, abdominal fullness, acne, head nervousness, allergies, blurred vision, pai eyes, and itching in eyes. *For complete clin data, see package insert.*

Dosage and Administration: 1. One table Norinyl-1 is administered orally for 20 d beginning on day 5 of the menstrual c (Count day 1 of the cycle as the first da menstrual bleeding.) Repeat this dosage sc ule for each cycle. 2. If no menstrual pe occurs after a cycle of treatment (20 tablet which patient adhered to the schedule, the tient must be instructed to resume taking Norinyl-1 tablets 7 days after the previou day course was completed. For example, if last pill of a previous cycle had been take a Sunday, then a new cycle of treatment sh begin on the following Sunday. 3. In the partum woman, it is recommended that first cycle of treatment should begin on d of the first menstrual cycle. However, Nori should not be administered during lactation.

Availability: Norinyl-1 (norethindrone 1 with mestranol 0.05 mg.)—Dispensers of 20 60 and bottles of 250 tablets.

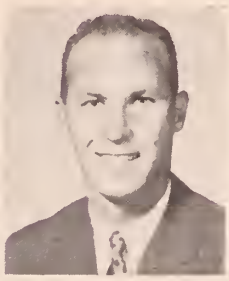
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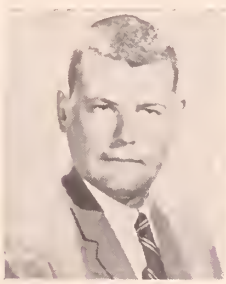
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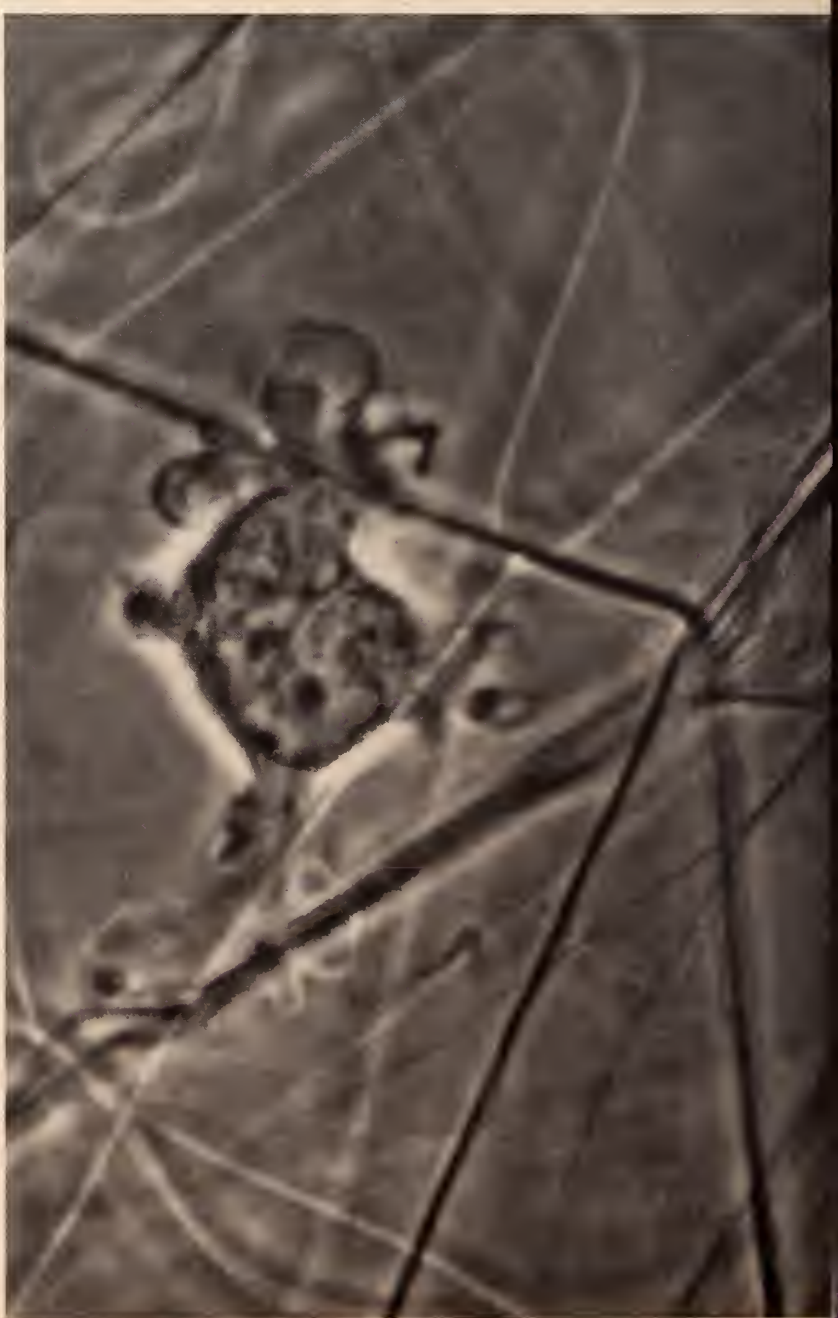
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INFLAMMATION:
A cellular fight for life

A SYNTEX REPORT based on recently developed hypotheses about topical corticosteroids, including the cellular theories of inflammation by Thomas F. Dougherty, Ph.D., University of Utah.

You are looking at a fibroblast fighting for life. This cell—one of the most common found in connective tissue—has literally been poisoned by cytotoxins released from other cells that have ruptured. Soon, if the abnormal activity of this fibroblast does not cease, it, too, will rupture and die—one more casualty in the inflammatory wave of destruction precipitated by injury.

Until a short time ago no one had ever witnessed such a scene at the cellular level. Now, through advanced cinemicrographic techniques, it is possible to view and photograph the inflammatory process as produced experimentally in living animal tissue. This method permits new insight into the mechanism of inflammation and the role of corticosteroids in therapeutic management. Equally important, these techniques shed new light on factors that may make one corticosteroid more effective than another—factors that can be correlated with other chemical, biologic, and clinical parameters.

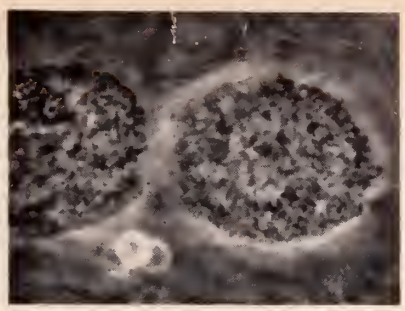


Visual evidence of how corticosteroids influence the inflammatory reaction

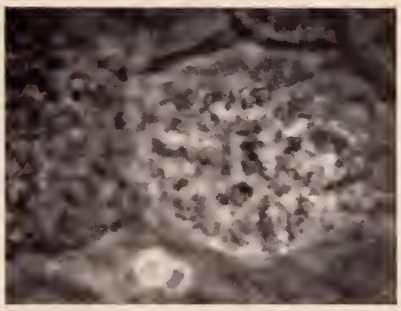
Working with phase-contrast cinemicrography on living animal tissue, Doctors Thomas F. Dougherty and David Berliner of the University of Utah College of Medicine have actually filmed cellular events that occur during the inflammatory reaction. This remarkable study* and additional work by these investigators, as well as by others, have established a new theoretical biologic basis for the antiinflammatory effect of the corticosteroids. (It must be noted that other theories, such as the lysosome or so-called "suicide bag" theory, have been postulated, although it is quite likely that there are more similarities than differences among the various theoretical models.)

The inflammatory wave of destruction

In this investigation an injurious injection of gelatin is used to set off an inflammatory reaction in living mouse tissue. What follows is a wave of destructive cellular activity that comprises the inflammatory response to injury. Mast cells (which contain heparin, serotonin and histamine) take up water, swell and rupture, releasing their contents, which are toxic outside the mast cell wall. These toxins, in turn, cause disintegration of other cells (such as fibroblasts) and the release of additional toxic material. Capillaries, too, take up water and leak unformed blood elements, causing edema. And polymorphonuclears, lymphocytes and perithelial cells invade the inflamed site. As a result of all these changes, the cellular environment reaches a state of turmoil.



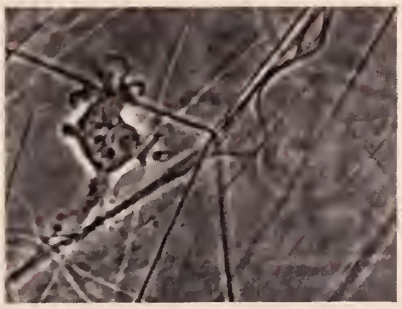
Phase-contrast microscopy showing mast cell before injury.



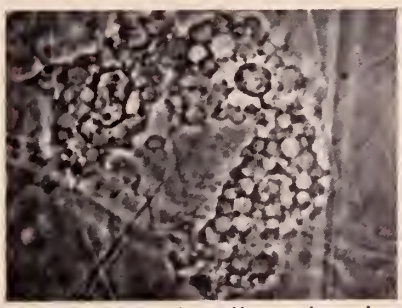
Mast cell (after injury) has broken up and released cytotoxins.

How corticosteroids change the picture

Corticosteroids appear to virtually stop the abnormal cellular activity that constitutes the inflammatory reaction. This permits the body's natural resources to clear up the inflamed area and repair the damaged tissue. This interpretation is supported by the fact that when the injurious gelatin solution is injected simultaneously with a corticosteroid – Synalar (fluocinolone acetonide) – the inflammatory pattern simply does not develop.



Fibroblast in high state of activity, much distorted.



Mast cells showing effects of corticosteroid action: cells are normal in size, shape and activity.



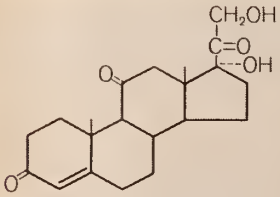
In summarizing his study Doctor Dougherty states: "...we also feel this work may explain why one corticosteroid helps a patient more rapidly and effectively than another. If it does, it is because one corticosteroid is the fastest, most effective inhibitor of the series of inflammatory events at the tissue level."

**A New View of Corticosteroid Action in Inflammatory Dermatoses,* a film based on this study, is now available from your Syntex representative.

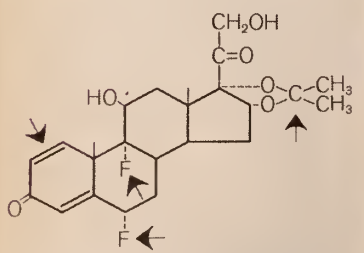
See last page for contraindications, precautions, side effects and dosage.

How advances in chemical design have achieved greater steroid potency

The chemical modification of corticosteroid molecules from the advent of hydrocortisone to the development of Synalar (fluocinolone acetonide) is a prime example of how biochemists can "design" to increase therapeutic activity and minimize undesirable side actions. Below, for example, we see the important changes that were made in reference to the hydrocortisone molecule to produce fluocinolone acetonide, one of the most active of all topical corticosteroids. As a result, a 0.01% preparation of Synalar (fluocinolone acetonide) has been reported to do the work of a 1% hydrocortisone product containing 100 times more cortiscosteroid. And it can often do it more effectively.



Hydrocortisone

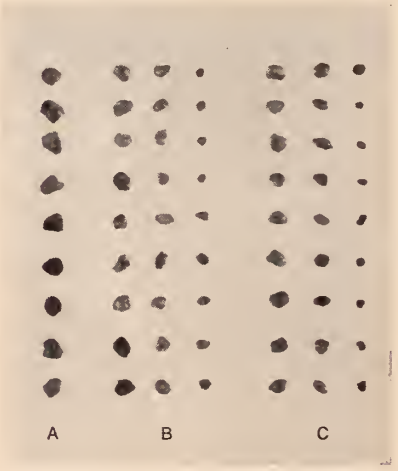


Fluocinolone Acetonide (Synalar)

- *a double bond between carbons 1 and 2*
- *fluorine substitutions at* both *the 6-α, and the 9-α positions*
- *the addition of the acetonide at the 16-α, 17-α positions, thus providing one of the most potent topical corticosteroids available.*

How bioassay tests are used to "predict" therapeutic potential

Biologic assays are another tool used by researchers to help establish the relative activity of corticosteroids. To date no single method of assaying corticosteroid activity has emerged as the ideal "yardstick" for predicting therapeutic potential. Taken together, however, these methods have proved useful. When such tests are run on various corticosteroids, a definite order of corticosteroid activity becomes evident. Compounds with the highest order of activity may be expected to merit clinical trial to establish their high therapeutic potential. When assayed by these methods, fluocinolone acetonide (Synalar) emerges as one of the most active topical corticosteroids, milligram for milligram, available for clinical application today.



THE THYMUS INVOLUTION ASSAY[1-4] is run on adrenalectomized rats. The sizes of the glands are measured, and the degree of involution caused by the steroid is determined as an indication of its potency. In the above photo, the comparative involution of thymus glands achieved with hydrocortisone and Synalar (fluocinolone acetonide) is shown. Untreated controls (A) show normal size. Group B – injected with 1, 2 and 4 mg. of hydrocortisone – show progressively smaller thymuses as does Group C – injected with fluocinolone acetonide – but with only 1/500th the dose of hydrocortisone.



THE ANTIGRANULOMA ASSAY[1-4] also utilizes adrenalectomized rats. Granulomas are induced by subcutaneous implantation of cotton pellets on either side of the thorax. The degree of granuloma inhibition achieved by a steroid reflects its potency. The above photo shows the inhibition of granuloma formation achieved with hydrocortisone and Synalar (fluocinolone acetonide). Untreated controls (A) show large, red granulomas adhering to the pellets. Group B, receiving hydrocortisone and Group C, receiving fluocinolone acetonide, show little, if any, granuloma formation. Fluocinolone acetonide produced the same effect as hydrocortisone with only 1/500th the dose. This assay, as well as the thymus involution assay, measures systemic rather than topical corticosteroid activity. Nevertheless, results by these methods correlate well with other assays and with the milligram potencies of topical steroids in current clinical use.

Worldwide clinical experience confirms the predictable therapeutic potential of Synalar

It is particularly gratifying that the promise of the advanced chemical design and high order of bioassay activity of Synalar (fluocinolone acetonide) has been confirmed by widespread therapeutic application. Indeed, the impressive clinical response rate of Synalar has been documented in no fewer than 232 papers from 22 countries.

Representative Clinical Results with Synalar*

Efficacy Documented in over 4,000 Patients

Condition	Number of Publications	Number of Patients	Significant Improvement†
Contact Dermatitis	27	750	713
Eczematous Dermatitis	21	472	409
Seborrheic Dermatitis	18	442	426
Atopic Dermatitis	24	460	426
Psoriasis	36	1,699	1,510
Neurodermatitis	18	351	324
Total	144	4,174	3,808

*Complete bibliography on request.

†Expressed by the authors as excellent, very good, good, complete remission of inflammation, etc.

PRESCRIBING INFORMATION

For initiation of therapy: Cream 0.025%, 5 and 15 Gm. tubes, 425 Gm. jars; *for emollient effect:* Ointment 0.025%, 15 Gm. tubes; *for maintenance therapy:* Cream 0.01%, 15 and 45 Gm. tubes, 120 Gm. jars; *for intertriginous or hairy sites:* Solution 0.01%, 20 cc. and 60 cc. plastic squeeze bottles; *for infected inflammatory dermatoses:* Neo-Synalar® Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes.

CONTRAINDICATIONS: Tuberculous, fungal, and most viral lesions of the skin, (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. PRECAUTIONS: Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. When severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. SIDE EFFECTS: Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. The neomycin in Neo-Synalar Cream rarely produces allergic reactions.

REFERENCES: 1. Lerner, L. J., Bianchi, A., Turkheimer, A. R., Singer, F. M., and Borman, A.: Anti-inflammatory steroids: potency, duration and modification of activities. Ann NY Acad Sci 116:1071 (Aug. 27) 1964. 2. Idem: Comparison of anti-granuloma, thymolytic and glucocorticoid activities of anti-inflammatory steroids. Proc Soc Exp Biol Med 116:385 (June) 1964. 3. Ringler, A.: Activities of adrenocorticosteroids in experimental animals and man, in Dorfman, R. I.: Methods of hormone research, New York, Academic Press, 1964. vol. III. pp. 234-280. 4. Gubersky, V. R.: To be published.

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1. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. *65*:311 (Feb.) 1953.



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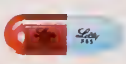
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Precautions: Tuinal should be used cautiously in patients with decreased liver function, since prolongation of effect may occur.

Adverse Reactions: Idiosyncrasy, such as excitement, hangover, or pain, may appear. Hypersensitivity reactions occur in some patients, especially in those with asthma, urticaria, or angioneurotic edema.



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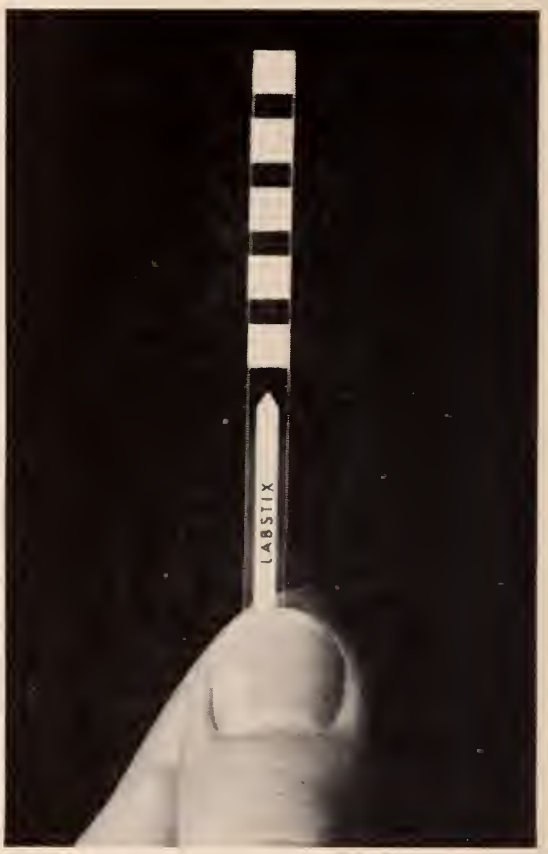
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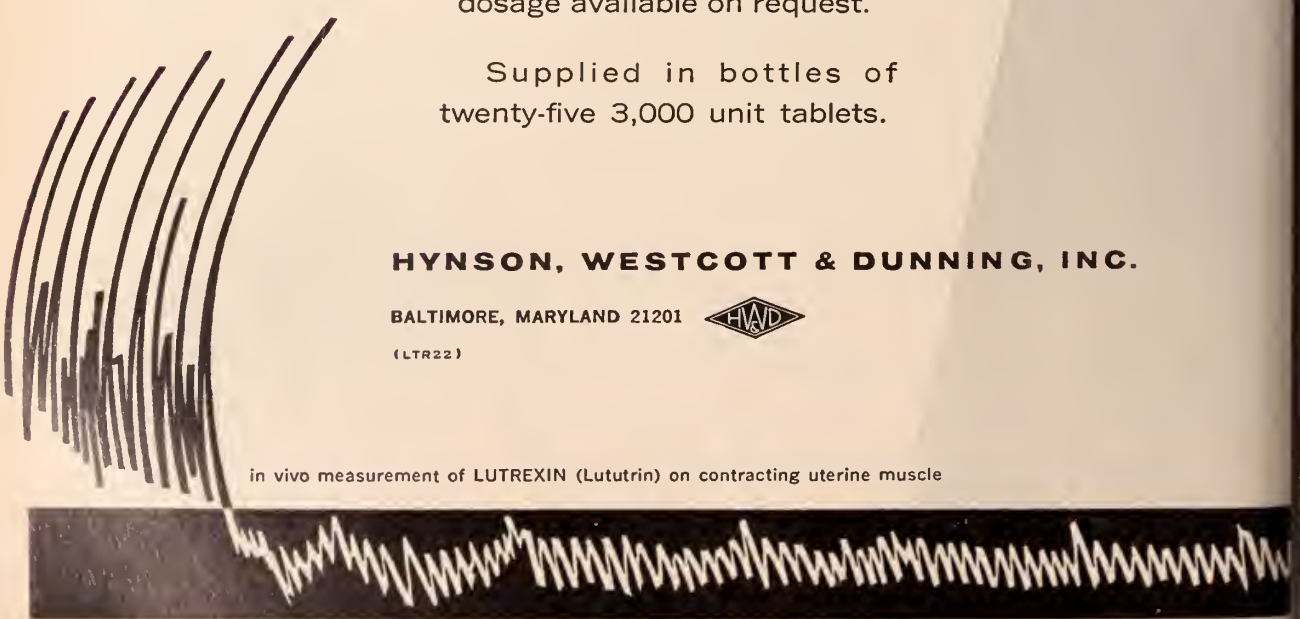
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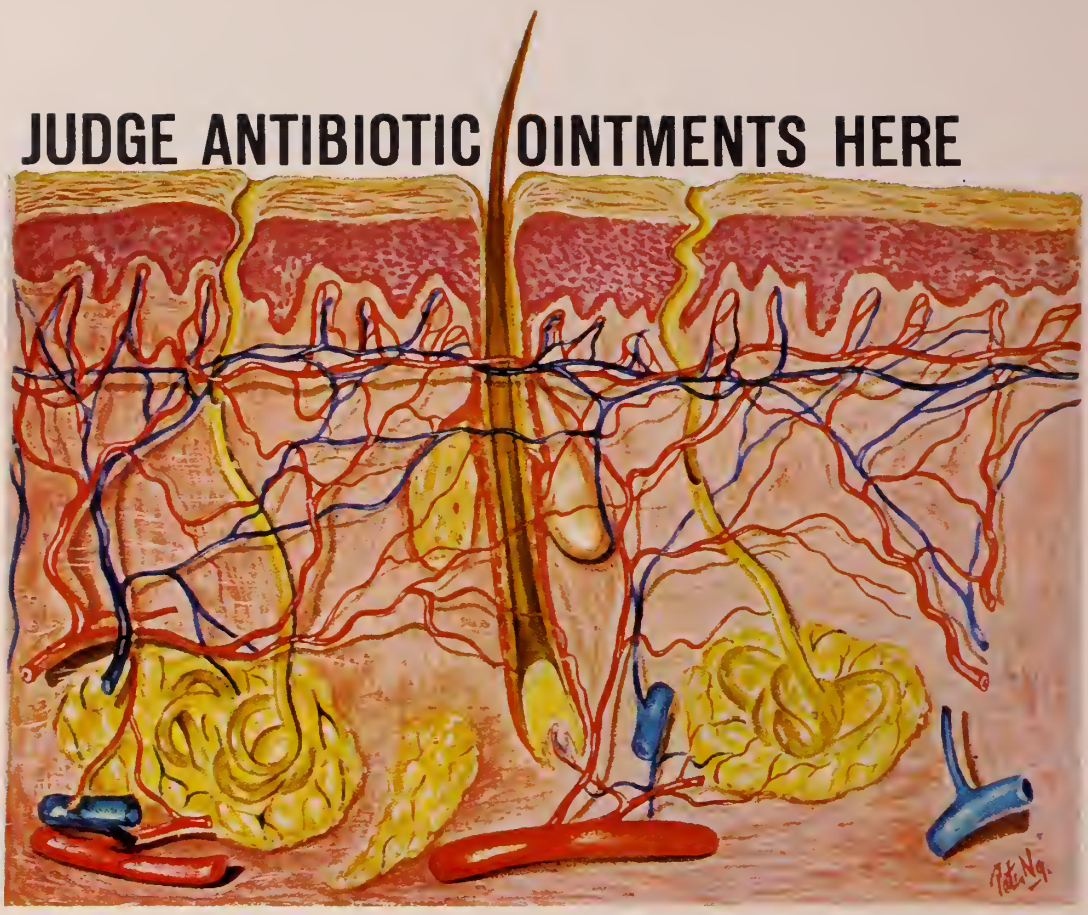
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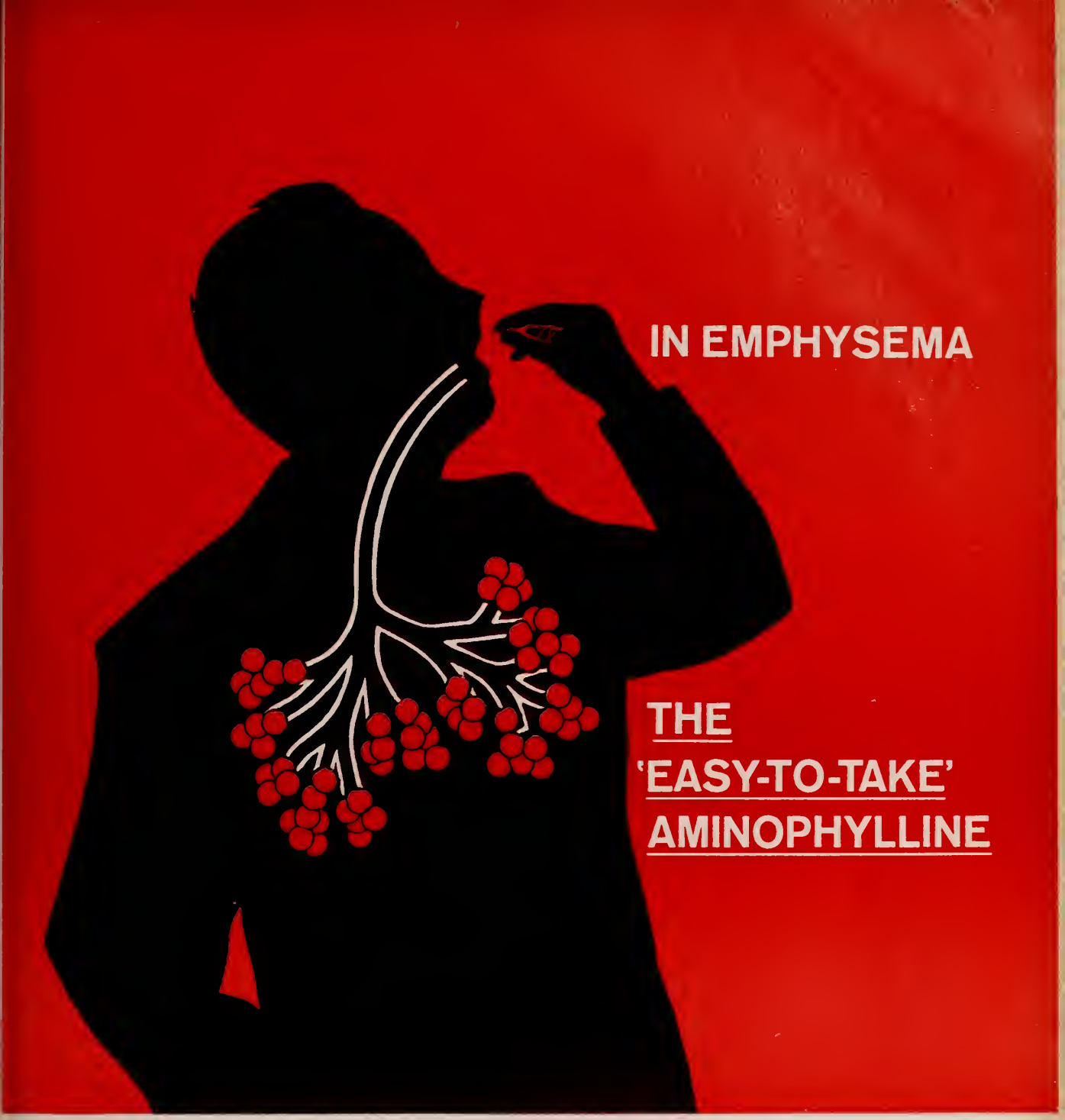
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EDITORIALS

The AMA Convention—And Why We Go

Knowledge is the one resource of man which not only cannot be depleted, but can, indeed be consciously increased. In the advanced, automated world of today, leisure time gained from the workaday world through automation may be spent in the classroom; in fact, in the future, people may be paid to go to school.

We physicians have long understood the value of knowledge—of education. We are forever involved in the task of "keeping up"—without pay it may be noted. However, some of us regard the task as onerous. In truth, "keeping up" is part of being a physician; it is a privilege and a responsibility.

A number of reservoirs of medical information may be tapped. These include colleagues, medical journals, medical news publications, continuing education courses, medical meetings and conventions, and numerous others.

Every year there is the "big show" where the physician can tap practically every reservoir: the Annual Convention of the American Medical Association. Last year some 600 scientific papers were presented, and 300 scientific exhibits were on display, as well as hundreds of industrial exhibits. In general, no other medical meeting in the world matches the range of subjects presented, from reviews of general medicine to experimental medicine and therapeutics.

The 116th Annual Convention of the American Medical Association will be held right here in New Jersey from June 18 to June 22 this year. Convention Hall and surrounding hotels will house the Scientific Program; the House of Delegates will meet at the Chalfonte-Haddon Hall.

Among special presentations planned are four general scientific sessions on backache, healing, patient care, and sex. Scientific Sections will offer programs individually, or will hold joint meetings on subjects of common interest. A full schedule of medical motion pictures is planned. At least five color telecasts will be broadcast, live from a Philadelphia hospital in cooperation with the University of Pennsylvania School of Medicine.

If knowledge is a resource, the AMA Annual Convention is surely a mother lode.

The "Routine" Examination

Most doctors are bored at periodic health examinations, or at "routine" physicals. The very word itself—*routine*—suggests monotony. And again, the idea of a "health" examination, seems a bit vague. The truth is, however, that a meticulous examination, including rectal, electrocardiogram, stool analysis, chest x-ray, and blood studies, will reveal a lot of information, especially if further studies are undertaken when suggested by the history, the complaints, or the findings at the screening. Sidel* reviewed the results of more than 5,000 "periodic health examinations" done on persons in seemingly good health and found that they turned up a substantial number of carcinomata of the colon, myocardial infarctions, nonfunctioning kidneys, duodenal ulcers, hyperthyroidism, emphysema, and even an aneurysm of the abdominal aorta — all in people who seemed in radiant health. (In the latter case, the aneurysm was surgically removed, and he lived happily ever after. Had the "routine" examination been omitted, he would long since have died).

A "negative" examination is not lost motion either. It has a reassuring effect on the patient's peace of mind. Dull as they seem to be, periodic "health" examinations can be anything but routine.

* Sidel, Nathan: SKF *Consultant*, 7:10 (March 1967)

The Self-Sabotaging Patient

While we doctors are busy defending our image, we sometimes forget that patients can be uncooperative to the point of sabotaging their own health. One thinks of the obvious example of the patient who insists on smoking, drinking, or overeating when his doctor tells him how hazardous these activities are. A report in the January 16 (1967) JAMA of a Cleveland study revealed that 42 per cent of a group of tuberculosis patients failed to follow doctors' orders about taking medication.

"In this era of potent and dangerous medications, patient reliability in taking drugs becomes a primary consideration," Dr. Maddock* said. "Most physicians are aware that some patients fail to take prescribed medicines, but few realize the extent of the problem."

The study started with clinic and pharmacy records at the University Hospitals of Cleveland, which indicated that 50 persons in the outpatient department were supposed to be taking the drugs isoniazid and/or aminosalicylic acid. It soon became apparent large numbers of patients weren't following directions when urine tests failed to reveal any trace of the drugs.

"Detection of the patient who is not taking his medicine is difficult," the report said. "Simply asking him seems unsatisfactory since patients tend to claim that they have taken medicine when direct evidence indicates that they have not."

An earlier study indicated that 83 per cent of families who insisted that they *had* given a full ten-day course in penicillin to their children, had in fact stopped well before the end of the ten-day period. There are even cases of a reverse uncooperativeness: patients who keep taking medication after the doctor insists that they stop.

All this, of course, does not justify neglect or indifference by the physician. Still, it seems only fair to say something for the defense in the current open season on doctors.

* Robert K. Maddock, Jr., M.D., University of Utah Medical Center, Salt Lake City. Formerly associated with University Hospitals of Cleveland.

Drug Quality: Mind Your P's & Q's & R's

In the months just ahead, the relationship between generic and trade-named drugs will be subjected to sharper-than-ever study. This study will be more meaningful if the *p*'s & *q*'s & *r*'s *of* drugs—*any* kind of drugs—are carefully considered. The *p* refers to *price* . . . the *q* to *quality* . . . and the *r* to *research*.

In marketing a drug, some companies will provide only *price;* other companies will provide *quality;* and still other companies will provide *quality* and *research*.

The more a company provides, the higher a drug's price is likely to be. Thus, a company that provides drugs at the cheapest prices tends to sacrifice quality and research—as it cuts corners to cut costs.

Incidentally, by *research*—I refer not only to a company's search for *new* drugs, but also to its *continuing* efforts to improve the quality of its *older* products . . . pharmaceutically and clinically.

To sum up: (1) From the standpoint of therapeutic effect, *the lowest-priced* gereric drugs tend to be the least desirable. Such products may be "manufactured for" or "distributed by" the company whose name appears on the label. (2) It is possible for a generic drug to be of good quality, but such a drug is unlikely to be the lowest-priced generic. (3) When applying *p*'s & *q*'s & *r*'s, pharmacists should evaluate a manufacturer in terms of integrity, facilities, and trained personnel. In other words, *who makes the drug product?* (4) The product that is backed by quality and research is the *best* one—*regardless of whether it is sold under a trade name or a generic name.*

Irving Rubin, R.Ph.
Editor of the *American Professional Pharmacist*

ORIGINAL ARTICLES

Modern therapy has reduced the death rate in this disease from 98 to 36 per cent. Even without an Infectious Disease Team, a good community hospital can still build a creditable recovery rate.

The Changing Spectrum Of Subacute Bacterial Endocarditis*

Allyn P. Kidwell, M.D./Basking Ridge

Subacute bacterial endocarditis is a disease with a changing spectrum. This has been illustrated in two recent articles comparing the natural history of the disease before and after the availability of effective therapy.[1,2] A total of 328 cases were there reviewed. Morgan and Bland[1] have noted that up until 1938, the disease was almost uniformly fatal, with a spontaneous survival of less than one per cent. After the introduction of sulfonamides, a "cure" rate of 4 to 6 per cent was reported. In 1944, Loewe *et al.*[3] reported the effects of penicillin in subacute bacterial endocarditis. This is the modern landmark in the history of the evolution of this malady. Since then, the literature has been replete with reports of large series of cases, reflecting the efficacy of a wide range of antibiotics and the long-term follow-up.[1,2,4-10] Several factors have changed the pattern of this disease: the availability of many new antibiotics;[5,11,12] the emergence of resistant strains of various bacteria;[13] the increasing frequency of organisms other than the classical streptococcus viridans; the gradual increase in frequency of endocarditis superimposed on atherosclerotic valves in elderly patients, compared with the decline of its frequency in rheumatic and congenital heart disease; and finally the influence of cardiac surgery[16] and the introduction of foreign materials[17] into the heart. To assess the effects of these changes on the recognition and treatment of bacterial endocarditis in a community hospital, the following study was undertaken.

Materials and Methods

The Record Room of the Morristown (N.J.) Memorial Hospital has cross-indexed all diagnoses during the last quarter of a century. This coincides closely with the period during which chemotherapy has been available for bacterial endocarditis. All charts coded as acute and subacute bacterial endocarditis were reviewed. Those cases that could be clinically or pathologically classified as *subacute* bacterial endocarditis were selected. Cases of *acute* bacterial endocarditis were excluded. Some charts were also excluded from the study for the following reasons: the final coded diagnosis on the front sheet disagreed substantially with clinical or autopsy diagnoses within the chart; the final diagnosis could not be substantiated after careful review of clinical, laboratory, or autopsy material; the diagnosis referred to a past episode not primarily diagnosed or treated at this hospital; the patient was transferred to another institution for therapy and lost to follow-up; the data in the chart were too meager to be meaningful; or the case antedated any chemotherapy, even though the diagnosis was adequately documented. In all, thirty cases of

* This is a 25-year review of experience at the Morristown Memorial Hospital.

subacute bacterial endocarditis, from 1942 through 1964, were admitted to this study.

Findings

Age and Sex—Of the thirty cases, fifteen were male. Ages ranged from three years to 76. Neither age nor sex appeared related to outcome of therapy in this series, whereas in other series,[14] elderly patients often had a higher mortality.[15]

Bacteriologic Diagnosis—Ten of the thirty cases were due to alpha streptococci, a small proportion compared to older series.[8] Four other cases of miscellaneous streptococci, are included. There were two cases of staphylococcus aureus infection, one related to valvular surgery[17] and one not. There were three cases of staphylococcus albus endocarditis, one secondary to a polyethylene catheter in the right atrium.[18] One patient had two episodes of treatment. During the first, no organism was recovered. In the second episode, three organisms were recovered. This was the only mixed infection, and the patient died of rheumatic heart disease, mitral stenosis and infected mural thrombi. One patient each had H influenza or H parainfluenza. Seven patients were considered (on clinical grounds) to have subacute bacterial endocarditis in spite of many negative cultures. Careful scrutiny of these charts was made before these cases were included. This constitutes an incidence of 23 per cent, within the 15 to 25 per cent cited by Anderson,[19] but higher than the 19 per cent figure given by Hall.[16] In only one of the thirty cases was no culture performed.

Underlying Heart Disease—Nineteen of the thirty cases, (63 per cent) had underlying rheumatic heart disease. These cases were fairly well distributed throughout the series with respect to age. There were four cases of congenital heart disease. One was a patent ductus arteriosus and the other a ventricular septal defect. Two cases of bicuspid aortic valve, diagnosed clinically as rheumatic heart disease, were found at autopsy. Only three patients had underlying arteriosclerotic heart disease. A 60-year-old female was one of these. She was the first patient to recover from subacute bacterial endocarditis in this hospital. There were too few cases of arteriosclerotic heart disease as the underlying cardiac disorder to discern any trend toward its increase as the basis for bacterial endocarditis.

Four of the thirty cases had no specific underlying heart disease. This 15 per cent is less than the 22 per cent reported by Pankey.[4]

A three year old hydrocephalic boy developed endocarditis, due to staphylococcus albus, after a polyethylene catheter had been inserted into the right atrium. This ultimately cleared when the shunt was taken down. This is an example of bacterial contamination following surgical introduction of a foreign body into the heart.[18] An eighteen-year-old girl had a heart murmur with a clinical diagnosis of systemic lupus erythematosis. She succumbed to a culture-proved streptococcus viridans septicemia. Autopsy was not done. The clinical data in this case are not sufficient to establish a diagnosis, although rheumatic heart disease appears a likely possibility. One 56-year-old male also could not be classified as to underlying heart disease. This patient had two episodes of bacterial endocarditis, both following dental work. The clinical data did not define the cardiac problem, and the patient survived both episodes of infection. The fourth patient whose underlying heart disease was not well defined was a 75-year-old female with recurrent episodes of fever of undetermined origin. The clinical data were compatible with a diagnosis of subacute bacterial endocarditis and the patient survived with adequate therapy.

A 54-year-old female had rheumatic heart disease, multiple emboli, and a mitral valvulotomy done in 1964. She survived two episodes of subacute bacterial endocarditis following the surgical procedure. After the second course of treatment, she was considered "clinically cured." She died a year later from a subdural hematoma sustained during an accident. Post-mortem examination revealed no evidence of bacterial endocarditis. This constitutes the only other example of surgical introduction of bacterial infection into the heart in this series.[15,16]

Therapy and Survival. This series begins co-

incident with the advent of effective therapy and continues during the years when therapy was evolving with respect to types and doses of antibiotics.[5,11,12] Thus, no consistent pattern of therapy can be seen in this series. However, a general trend toward dependence upon large doses of penicillin (from 10,000,000 to 20,000,000 units a day or more) can be seen, as can be seen the trend toward dependence upon multiple antibiotics, and in particular on the reliance on penicillin and streptomycin as the treatment of choice, as emphasized by Hall[6] and others. The duration of therapy, the subject of considerable discussion in recent years,[20,21] tended to be three to seven weeks in the cured cases in this series. While the number of cases is too small to document statistically, in general it appears that the less successful outcomes were associated with haphazard therapy, with a variety of antibacterial agents administered for short periods. To the 28 patients treated since 1944 (when the penicillin era began), 34 courses of therapy were given. Six patients were treated twice, and five of these survived.

This series is remarkable for the high degree of "recognition" as stressed by Uwaydah and Weinberg.[2] Twenty-nine of the thirty cases had at least one blood culture performed. In only one case was the diagnosis not considered at all, and this in 1949. In seven cases, therapy was instituted in spite of persistently negative cultures. The trend toward treatment on clinical grounds alone (without insisting upon bacteriologic confirmation) is distinctly increasing in the latter part of this series, as is the trend to do more blood cultures earlier in the course of an obscure, febrile, illness, even in the absence of clinical hallmarks. Of the thirty patients in this report, nineteen survived. However, the first four (1942 to 1946) received either no treatment or what must be considered inadequate treatment by present standards. A fifth patient (1949) was neither diagnosed nor treated. Therefore, 19 of the 25 adequately treated patients, or 76 per cent, survived their disease. This compares favorably with other series.[1,2,4,9] Of the nineteen survivors, eight died from two months to four years following their treatments and were autopsied at this hospital. In each of these eight cases, the heart valves were found to be free of bacterial vegetations. However, a sterile abscess of the myocardium was found in one.

Comment

Because of the determination to limit this study to *subacute* endocarditis, and the attempt to exclude acute bacterial endocarditis, a difficulty in classification became apparent, as emphasized by Vogler.[9] Subacute bacterial endocarditis has been arbitrarily designated by White[22] to have a clinical course in excess of two months. This differentiation proved inadequate because often the onset of the disease was difficult to establish and because, today, the course of the disease is so often interrupted by therapy. Classification by bacterial etiology is also unsatisfactory. We now know that all cases of subacute endocarditis are *not* caused by the streptococcus viridans as previously thought, and in not every case is the organism identified. Autopsy data, particularly in the more recently treated cases, were not totally satisfactory because postmortem cultures, if done at all, were often sterile, and the vegetations did not have a characteristic appearance related to their age. The final selection of cases included in this study was made on an individual basis, by meticulous scrutiny of the charts for details of history, clinical course, physical findings, cultures and other laboratory data, and autopsy data when available, following the criteria of Vogler, *et al.*[9] This was, by necessity, arbitrary in some instances; and some of our figures and final analyses would have varied had *all* cases of endocarditis been included.[9] It has been suggested by Glasser and Rifkind[5] and by Tompsett[23] that the differentiation of acute from subacute bacterial endocarditis is arbitrary and unnecessary and that definition by etiologic organism, whenever possible, is preferable. Hamburger,[24] however, feels that there is still merit in this differentiation.

The high incidence of rheumatic heart disease as the underlying cardiac abnormality in the large majority of these cases is not surprising in view of the exclusion of acute bacterial

endocarditis. This latter form of endocarditis, as pointed out by Uwaydah and Weinberg,[2] tends to occur in older people on arteriosclerotic plaques or valves; or in the absence of valvular disease altogether. It runs a much more fulminating down-hill course and is more often not diagnosed antemortem. It is more frequently associated with more virulent organisms such as the penicillin-resistant staphylococcus aureus.[25]

Arteriosclerotic heart disease formed a background for only three cases in this series; congenital heart disease was diagnosed in two antemortem and two more postmortem. Surgery involving the heart accounted for two more cases, and will undoubtedly account for more in the future.

This series was notable for the absence of enterococcal (streptococcus faecalis) endocarditis,[26] for the absence of fungal or candida endocarditis,[27,28] and for the absence of any cases of right-sided endocarditis.[2] The portals of entry for endocardial infection included the usual routes, such as teeth, genito-urinary tract, and skin. However, for most, the portal of entry was unknown. Two patients had transurethral prostatectomies while under treatment, and both survived.

The cure rate reported in this series corresponds favorably with that reported elsewhere. This is perhaps better than might be predicted from a hospital where there is no specific Infectious Disease Team to assist in making the diagnosis and in managing the treatment. The "recognition" rate is unusually high. While it is logical to expect that earlier recognition, and intensive, adequate, and prolonged chemotherapy might raise the cure rate, it is still clear that bacterial endocarditis is an ominous disease that carries a significant mortality, whether treated in a university hospital or in a community hospital.

Two patients in this series were allergic to penicillin. A 55-year-old female with rheumatic heart disease had two courses of treatment. The first course did *not* include penicillin, and was *not* curative over a period of three months. The second course included 12,000,000 units of penicillin daily for thirty-eight days. There was no problem with the penicillin allergy, and the patient was clinically cured. One month later she sustained a fracture of the hip and died of a pulmonary infarction. At autopsy, no evidence of bacterial endocarditis was encountered. A 35-year-old male with rheumatic heart disease was treated with 20,000,000 units of penicillin daily for five weeks and 2 Grams of streptomycin daily for ten days in spite of a history of allergy to penicillin. Precautions were taken on beginning the therapy. On the tenth day of treatment, a skin eruption appeared; this grew increasingly severe, finally necessitating treatment with corticosteroids. The patient was able to complete the course of penicillin uneventfully. Five months later, however, he died suddenly. At autopsy a sterile abscess of the myocardium adjacent to the mitral valve was found. This was one of the more unusual complications of bacterial endocarditis. Embolization was common, occurring in 11 of the 30 cases. Congestive heart failure and ruptured valvular cusps were not encountered. Uremia occurred only once. Bacterial sensitivity by the tube dilution technic was carried out only twice in the 30 cases. This seems contrary to current practice and should undoubtedly be resorted to more often when the organisms can be identified.

Summary and Conclusion

We reviewed the records of all patients with a discharge diagnosis of subacute bacterial endocarditis, treated in the Morristown Memorial Hospital between 1939 and 1964. This encompasses the era of chemotherapy of this disease. Thirty cases were selected for this study. The recognition rate was high in this group, and treatment was rendered for valid indications. Of the treated cases, the cure rate was 76 per cent, corresponding well with other published series. Etiologic factors, bacteriologic findings, portals of entry, and complications differed little from other experiences with the disease. A history of penicillin sensitivity did not preclude its use for two patients in whom bacteriologic cure was attained.

In most cases, massive doses of penicillin,

often combined with other antibiotics, constituted the most successful therapy. However, there was no consistent approach to treatment evident in this series. This is to be expected in a community hospital without an Infectious Disease Team, but is theoretically disadvantageous. Similarly, reliable bacterial sensitivity studies were not employed with sufficient frequency.

Bacterial endocarditis is better defined by etiologic organism than by clinical course. It still remains a serious disease with a significant mortality. While a decline in bacterial endocarditis secondary to rheumatic heart disease may be expected in the future, a rise in bacterial endocarditis secondary to atherosclerotic heart disease, to emerging resistant organisms, and to increasing surgical attacks on heart disease may be predicted, further to alter the already changing spectrum.

A bibliographic listing of 28 citations appears in the author's reprints.

56 Fieldstone Drive

The Civilian M.D. In Uniform

The physician is trained to care for the individual patient; the armed forces must operate on the principle of "the greatest good for the greatest number." There lies one of the most difficult adjustments facing the young physician when he enters military service, say three Army medical officers in the February 1967 issue of *Environmental Health*.

More than 3,000 physicians were questioned about their attitudes toward military medicine during the past eight years as they entered the Army medical corps. The questions were repeated when the doctors had completed an orientation course. Only about a third answered yes to the question: "Do you believe that, ethically, a physician's primary responsibility can be to an organization rather than to an individual patient?" A majority of the young doctors felt that military medicine regimented and limited the physician's method of practicing medicine. Many felt that frequent transfers in military life had bad effects on family living, and that financial returns were much lower than civilian practice. But the new Army doctors had favorable attitudes about the quality of military patient care, hospital facilities, medicines, and equipment. They liked the somewhat shorter hours, retirement provisions, and the assurance of adequate staff and facilities that military medical practice offers.

But the young physicians' attitudes didn't change concerning patient care. At the end of the orientation course, the same number still believed that a doctor's first responsibility is to his patient, not to an organization.

If only a slightly larger ratio of physicians could be persuaded to pursue a military career, draft requirements for doctors could be drastically lowered, the authors said. The study indicated, they said, that financial rewards, professional status, and opportunities for advanced training are the areas that most concern the physician considering a military career; improving these might improve the military's physician-retention rates.

The authors are Lt. Col. Edwin T. Cooke, Major Jonah P. Hymes, and Capt. Robert J. Mixson of the Medical Field Service School, Fort Sam Houston, Texas.

New Jersey now has a modern program for its handicapped children. Private practitioners are urged to participate along the lines here suggested.

Special Education For The Handicapped Child

Implications for the Practicing Physician in New Jersey

Alfred R. Richlan, M.D./Newark*

Teaching is the business of schools. The major activity of most children is attending school — for the purpose of learning. To learn effectively, the student should be healthy. School health programs aim to promote optimal health so that a child may obtain the fullest measure of educational potential.

Physicians have a major role in providing adequate health programs for school children. We must work collaboratively with educators to develop and carry out these programs. The physician as a citizen is interested in providing the best educational opportunities for all children; as a doctor he is interested in maintaining the health of children so they can obtain an education. His interest in the health of school-age children should extend to school health programs and their management of the health problems of his patients.[1]

This paper is directed primarily to the physician without official school connection and concerns his relation to one area of school health: the handicapped child. The private practitioner must support school programs and be knowledgeable about the special services provided by them; he must possess professional knowledge of school health problems so that he may competently manage his patient's school-related problems. He must support and direct the child and his family with respect to school-related problems.

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Although physicians generally communicate freely with each other about matters concerning their common patients, doctors in the community and those in the schools rarely communicate directly. This sometimes contributes to misunderstanding and may even put the doctors in an adversary position. Such a situation starts when parents' anxiety about their child causes them to present an unduly critical view of the school health program. The family physician might accept this view and react to it by criticizing the school health program and personnel. Under such circumstances, direct communication with the school physician or school nurse often would lead to clarification and a constructive solution. The private physician should communicate closely with the school for an exchange of possibly vital medical information about his patients.[2]

School health committees of medical societies may provide the practicing physician with a bridge between goals of community practices and those of school health programs. On a national scale, the American Medical Association and the National Educational Association have had a joint committee on school health for more than a half century. There should also be such ready resources, locally, for presentation of problems shared by parent-teacher groups, official and voluntary health, welfare, and educational persons or agencies.

Any child unduly preoccupied by a problem,

real or fancied, warrants special consideration in view of its potential development into a handicap. Interference with normal growth and development or requirement of special attention beyond that given to other pupils constitutes obvious evidence of handicap. In providing for the health and welfare of handicapped children, the practicing physician has two major roles. First, he should be concerned about the prevention, diagnosis, and treatment of physical or emotional handicaps in his own patients; and then, he should lead in the promotion of improved and expanded health, educational, and welfare services for all handicapped children in his community.[3] In many communities there is a gap between the availability of services and the need for them. Civic minded physicians can do much to extend and improve services.

The education of handicapped children in the public schools in New Jersey has been advanced through a series of laws dating back more than fifty years. Many of these laws have been up-dated. Statutes which arbitrarily discriminate between children on the basis of medical classification rather than educational needs have been revised and consolidated so that the best features of each are now made accessible to all. Recently revised legislation[4] has unified previously mandated services and extended to disabled children educational services not heretofore available in New Jersey. This legislation requires public school districts to identify and classify all handicapped children. The aim is not simply to categorize them for special class placement, but also to determine the appropriate educational program which will best serve the child. Diagnosis and classification should always include a medical examination, a psychological evaluation, and an educational assessment by a child study team functioning together. Diagnosis, classification, and placement should be focused as to first consider the individual child; second, other children; and third, the community in which the child lives and functions.

The State Department of Education provides leadership, offers expert consultation, sets standards, approves programs for sharing costs and enforces laws and regulations. The Special Education Office† maintains records of handicapped students with a view to future needs and it offers leadership by way of regulatory and service components. Some services for school age children attending nonpublic schools may be provided as a public health activity of the State Department of Health, (Division of Constructive Health) through one or more programs. These programs relate to crippled children, maternal and child health services, and dental care. Consider first the classification.

A. Legal Categories of Handicaps or Learning Disabilities:

1. Mentally retarded
2. Visually handicapped
3. Auditory handicapped
4. Communication handicapped
5. Neurologically or perceptually impaired
6. Orthopedically handicapped
7. Chronically ill
8. Emotionally disturbed
9. Socially maladjusted
10. Potentially severe learning disabilities
11. Multiply handicapped

B. Features of administration and procedures of value to the physician examining a pupil for classification regarding special education programing include:

1. The school physician may administer the procedures for classification; he approves, interprets, and reports any medical examination given for purposes of classification.

2. Whenever the board of education considers this advisable, a physician, surgeon, or specialist of recognized standing (approved by the Commissioner of Education) may be appointed for the purpose.

3. Classification of a child into a legal category of the handicapped is based upon a meticulous physical examination in addition to special examinations pertaining to the nature and degree of impairment.

4. A school physician is empowered to accept and approve a report of findings made by other examiners who may or may not be designated by the local board of education. The former's signature will also certify to the accuracy of the report.

5. Personnel involved in accommodating the handicapped include: administrative and supervisory; classroom, supplemenntal, and individual instruction teachers; learning disability teacher-consultants; psychiatrists; other medical (including physicians) and

†The law is administered by the Office of Special Education Services, Boyd E. Nelson, Ed. D., Director; Division of Curriculum and Instruction; New Jersey State Department of Education.

school nursing personnel; school psychologists; visiting teachers (school social workers); speech correctionists; physical therapists and occupational therapists; and approved examiners.

6. A local board of education may place (in New Jersey or adjoining states) its handicapped children in the local district, sending-receiving among districts, jointure programs, state operated programs, hospital or institution confinement, and under certain conditions, in a non-public school.

8. Instruction for the handicapped child includes: special classes, supplemental instruction, individual instruction, counseling and consultation, administration and supervision, and special scheduling.

C. Medical Examinations of the Handicapped Child:

The physician examining the child about whom there is concern regarding educational programing is in a position to acquire, interpret, and share information that would be unavailable from any other source. Parents have the primary responsibility for the health and development of their individual child, but they turn to their family physician for protective and therapeutic health care, counseling, and support in helping their children attain optimum health and develop to their maximum potential.

Identification of learning handicaps may be made initially by educators. However, the help of the physician is usually sought as to etiology. In addition to diagnosis, estimates of severity and prognosis are needed. The examining physician helps in assessing maturational, physical, intellectual, and psychosocial factors; seeks to delineate relationship of findings to the cause of the handicap as primary, secondary, or non-contributory. A form is available upon which to document such opinions and recommendations.[5]

A thorough physical examination is done to establish the need for classification of a pupil. This may be considered a special examination when the findings clarify the function and degree of impairment. Recommendations to the school physician for general physical examination of pupils have been published.[6] Emphasis is placed on function of the sense organs. Suggested items include:

a. *History* — includes but is not limited to·

(1) Familial (with genetic implications), sibling, deaths, prenatal, birth, postnatal.
(2) Developmental
(3) Behavioral
(4) Educational experiences

b. The physical examination includes but is not limited to:

(1) Examination of the sense organs
(2) Neurologic
(3) Orthopedic
(4) Cardio-Pulmonary
(5) Genito-urinary

In this discussion of the special medical examination it is important to remember that a medical diagnosis is not synonymous with an educational diagnosis. It follows, then, that medical management may have a limited relationship with educational planning. However, the medical diagnosis with the physician's recommendation for medical management can contribute considerably to the school staff's understanding of the child, his problems and his potential.

The school physician will review the reports rendered by other physicians. If a further medical examination is required for special educational programing, the school physician makes the appropriate referral. If abnormal findings turn up, this information is submitted to appropriate persons, including parents. These findings become part of the school's record.

The school officials make the final decision about placing the child in a school program which meets his individual needs. The examining physician should be informed of the "educational prescription" for the handicapped student following team evaluation. Any classification made is valid for three years but medical examinations are done at least once a year to determine clinical course and efficacy of educational program.

One of the common handicaps is *mental retardation.* We have three classes of retardation, defined as follows:

(1) *Educable* mentally retarded children are those who may be expected to succeed with a minimum of supervision in homes and schools and community life and are characterized particularly by reasonable expectation that at maturity they will be capable of vocational and social independence in competitive environment.

(2) *Trainable* mentally retarded children are so severely retarded that they cannot be classified as educable but are, notwithstanding, potentially capable of self-help, of communicating satisfactorily, of participating in groups, of directing their behavior so as not to be dangerous to themselves or others, and of achieving with training some degree of personal independence and social and economic usefulness within sheltered environments.

(3) Children who are so mentally retarded as to be neither educable or trainable. These cannot benefit from instruction.

Special examination should prevent erroneous classification and assignment in school. The behavior of children with serious hearing loss or emotional disturbance may simulate that occurring in some forms of mental retardation. Normal intelligence may be masked by manifestations due to sensory or cultural deficits.

Visually handicapped pupils are evaluated for defects of vision and visual acuity, and abnormal physiologic conditions of the eyes which may establish the need for special education services.

Auditory handicapped children need, of course, audiometric and related examinations to determine the nature and degree of the impairment. We need, too, a medical interpretation of speech and hearing patterns.

The term *communications handicapped* is a relatively new one and describes children with substantial speech and language disorders. Here we need a description of the organic and functional nature of the handicap and its relationship to language in its broadest sense. Hearing loss, neurologic impairment, and malformation of the organs of speech pertaining to articulation, phonation, and rhythm are to be evaluated. Special examination is indicated if the severity of disability warrants special education.

Neurologically or perceptually impaired. For school purposes this category includes primarily children with abnormal response to stimuli (visual, auditory, kinesthetic, tactile) and abnormal ability to assimilate and organize information inputs due to sensory and motor defects. What is here required is to appraise the degree of the following manifestations presumed due to cerebral damage or malfunction:

Perceptual disorders
Convulsive disorders
Failure of intersensory integration
Other disorders associated with abnormal neural development

Orthopedically handicapped requires a determination of and degree of loss, defect, or deformity of bones, muscles, or other soft tissue. This extends to cerebral palsy and neuromotor involvement.

Chronic illness as a handicap requires special examination for such conditions as tuberculosis, leukemia, asthma, chronic systemic diseases, malnutrition, or diseases otherwise uncategorized which make it impracticable for the child to receive adequate instruction through the regular school program.

Emotional behavioral symptoms frequently result from physical, neurologic, and physiologic abnormalities as well as environmental influences. The assumption should *not be* made that deviant behavior is social or emotional only. A history of the child, his family, and his educational experience is indispensible. A significant degree of apparent disturbance calls for referral to a child psychiatrist for confirmation of diagnosis; severe disturbance can be equated with mental illness. The physician may be called upon to determine whether the child's deviant behavior constitutes so serious a risk to himself and others as to justify consideration for non-school referral or placement.

Social maladjustment is also a "handicap." This is distinguished from the "emotional-behavioral" category above by finding that the maladaptive behavior is primarily cultural or social in origin.

Potentially severe learning disabilities are of concern also. All handicapped children have learning handicaps that need ameliorating and prevention from further learning handicaps. Many children, who do not readily fall into the other categories of classification, are meeting school failure and need special help.

Multiply handicapped: This refers to children who present any combination of disabilities requiring special education programing. After investigation of each disorder, the most disabling condition should be listed as primary. Optimal combination of available educational services should be prescribed on an individual basis.

The parents or guardian of a child participating in a special education program due to a handicap should be urged to obtain at least a yearly evaluation of their child by the family physician, clinic, or agency. The results or opinions expressed by such physicians and agencies should be available to boards of education upon request by school authorities.

It is recommended that each child enrolled in a special program for the handicapped be examined at least yearly by the school physician in order to assist in making necessary educational adjustments.

Nearly all children, whether in special education programs or not, benefit by physical education experiences. They must, however, be individualized. Groups must be small and compatible. The school physician plays an

intimate part in evolving suitable programs by a close working relationship with the administration and the physical educator.

Many children are temporarily excused from participation in regular physical education and certain recreational activities for a variety of reasons, not all of them for physical reasons. During such periods, these children can often participate to a limited degree and in small groups, permitting individualization. Some children excused from physical education or recreational activities are found to be motivated by emotional reasons rather than the alleged physical causes. The school physician, with the benefit of the knowledge and opinions of the staff, is in good position to discuss such findings and opinions with the family physican in order to reach a better understanding between the home and the school, and to evolve an appropriate physical education program.

Bibliography

1. Paul, J. R., Jr. and Dukelow, D. A.: Pediat. Clin. N. Amer., 12:1071 (1965).

2. Report of the Committee on School Health of the American Academy of Pediatrics, 1966. Evanston, Illinois.

3. Wallace, H. M.: *Health Services for Mothers and Children*. Philadelphia, 1962, Saunders.

4. Tentative Rules and Regulations of the State Board of Education Pertaining to Special Education, Pursuant to Chapter 29, P. L. of 1966.

5. SE-88, Medical Evaluation for Special Education Classification, Office of Special Education Services, New Jersey State Department of Education.

6. HS-1, Recommendations for Pupil Health Appraisal and Medical Examination by the School Physician, Office of Health, Safety and Physical Education, New Jersey State Department of Education.

181 Roseville Avenue

Insulin In Protein Ingestion

Protein meals (500 Grams cooked beef or chicken liver) were fed to healthy subjects. Plasma insulin, leucine, and amino nitrogen increased. Increases in plasma insulin were greater than those expected to have resulted from the increases in plasma leucine. Ingestion of protein meals results in significant increases in plasma insulin and the increases cannot be accounted for solely or even largely by the effect of L-leucine contained in the meals; ingestion of protein and rising plasma levels of certain amino acids appear to be associated with a physiological stimulus for insulin release. The purpose of the insulinogenic response to protein ingestion is to aid both in the utilization of absorbed amino acids and in their synthesis to protein.

J. C. Floyd, Jr.
J Clin Invest 45:1479 (Sept) 1966

Hemophilia In Infants

The bleeding manifestations of 192 infants with hemophilia are reviewed. In the newborn period hemorrhages rarely occurred except after circumcision. Even after this surgical procedure the majority of infants surprisingly failed to have bleeding. Data are presented to show that no transplacental passage of factor VIII takes place to account for this protection from hemorrhage. The onset of symptoms during the first year correlated well with the severity of the disease. The analysis of the patients with respect to severity of disease and family history underscores the importance of both personal and family history in the diagnosis of hemophilia in infancy. The family history may be negative in patients with severe disease.

R. L. Baehner and H. S. Strauss
New Eng J Med 275:524 (Sept 8) 1966

Clinicians rely so much on the laboratory, yet so seldom know how to appraise its reliability, that this unusual monograph should interest all of us.

Improving Quality Control In The Hospital Laboratory*

Hugo C. Pribor, M.D. and Marvin Shuster, M.D./Perth Amboy

How much quality control in the hospital laboratory? This question is becoming critical as laboratory testing volume increases. By 1968, for instance, laboratories will be doing an average of six to eight tests per patient day, compared with today's average of three to five. We at Perth Amboy General Hospital expect to do more than one million tests during 1968 compared with four hundred thousand in 1966, excluding any expansion of the hospital itself. Outpatient screening programs may raise this total still higher. Thus, there will be increasing reliance on laboratory tests as a "routine" diagnostic aid. But the laboratory will fulfill this new role only if it can assure a reliable accuracy level, and understand its limitations, and if the medical community as a whole understands them too.

So the sooner quality control methods are adopted in all hospitals, the better. For one thing, it will be simpler to perfect control technics now than later, when volume builds. For another, consistently high control standards will become more important with the growth of data processing and data exchange between institutions. The final result can be no better than the quality of the original data input, no matter how sophisticated the computer or automated the sharing process.

What Does Quality Control Cost?

An intensive program — complete with duplicate testing, statistical quality control methods, top quality equipment and supplies — can cost 10 per cent or more of total billing in a large laboratory. In a small laboratory, the proportion may run still higher. Yet controls are even more necessary here because procedures are run less regularly, equipment may not be the latest and reagents and supplies may not be changed as often nor handled as skillfully as in larger, more sophisticated operations.

The other side of the economic coin, however, is that improved quality control can help build laboratory test volume and, in turn, hospital revenues. As a result, the patient receives better care, has his stay shortened, and stands a better chance of having undetected abnormalities uncovered while all the facilities of a hospital are available. The physician can treat more patients in less time too, reliable test results can help him diagnose more precisely.

Recent Advances

Methods exist not only for controlling quality in biochemistry, but also in hematology and, to a lesser extent, in microbiology, blood banking and anatomic pathology. Equipment is more accurate; standard solutions, reagents, and controls are more consistent and widely available; and quality control procedures themselves have been refined and simplified. Physicians owe it to their patients to accept only the most rigorous control standards in the laboratories they use.

* This work is from the Perth Amboy General Hospital, where Dr. Pribor is Director of Laboratories and Dr. Shuster is Associate Pathologist.

Some of the more important advances have come in the area of equipment. Precision of equipment has increased as has the degree of automation. The two work together, since improved precision minimizes instrument errors while increased automation removes the risk of operator error. Newer instruments also reduce the amount of handling steps for many specimens, thereby eliminating opportunities for error that accompany each step. And, awareness of its importance has grown among clinicians, pathologists, laboratory personnel, and the hospital staff in general.

One of the most valuable informational aids is the seminar series on quality control developed by the Commission on Continuing Education of the American Society of Clinical Pathologists. The society also produces kits with step-by-step instructions and forms for setting up control programs or individual procedures.

It is a serious oversight to think that quality control begins and ends in the laboratory. Actually, it can be effective only if it extends from sample collection through final reporting. Of course, errors such as drawing samples from the wrong patient or transcribing the wrong result are rare, but they are often the most serious. At worst, they can mislead the clinican into prescribing therapy that endangers the patient. At the least, they waste everybody's time. Cross-checking is the simplest way to eliminate risk of drawing the wrong sample. For example, we instruct our collection team to check at least three of the following against the work order before drawing a sample: name on wrist band, hospital number, room number, age, or sex. These cross checks should be the absolute minimum. Collectors also ask "Who are you?" rather than "Are you John Doe?" when speaking to the patient, in order to decrease the likelihood of picking up any possible mis-identification.

To eliminate errors due to variation in collection procedures, we use a written procedures manual on sampling. This is distributed to all physicians on the staff, to collection teams, and to other laboratory personnel. It is also an orientation aid for new members of the staff. It is a training aid in our technicians' school. If a procedure is changed, it is done so in writing. Cross-checking can also apply to the clerical work involved in reporting and transcribing results. The system we use is to have one girl write up the final report and a second girl check this against the technician's handwritten result. Finally, the supervising technician reviews the lab report form before releasing it to the patient's chart.

Statistical Quality Control

In the laboratory itself, the central element of most quality control programs is the concept of statistical quality control. The concept has roots in mathematical probability theory. Its implementation has been simplified to the point where technicians themselves can do most of the figuring and plotting. Statistical quality control works on the assumption that there will always be an irreducible amount of variation in any testing procedure. Measure your height ten times to the nearest $\frac{1}{16}$ inch, for instance, and chances are you will come up with several different readings, not a consistent value. From a reliability standpoint, the important question is how close together all the numbers are, not what the single number is that uniquely defines your height.

The same thinking applies to many quantitative tests. The important question in a blood area nitrogen, for example, is not whether the reading is 16.0 or 16.1 milligrams, but whether it is 16 or 25. We can overlook the small variation but we must be absolutely sure there is no gross error. Statistical quality control concedes the smaller variation in order to insure against the larger.

"Standard deviation" expresses the spread of readings in a particular set of measurements or tests. One S.D. ("standard deviation") is the degree of spread within which 68.3 per cent of all readings fall. Two S.D.s envelop 95.4 per cent and three S.D.s cover 99.7 per cent. The three deviation limit is called the

"confidence limit." Hence a "confidence limit" of plus or minus 3.5 in a BUN means that 99.7 readings out of 100 on a standard specimen will fall within 7 milligrams of each other. Put another way, you know that a BUN of 15 actually means a urea nitrogen content of 11.5 to 18.5.

The "confidence limit" concept is valuable not only in measuring the precision of laboratory tests but also interpreting test results. Assume for instance, a patient has a BUN of 18 on admission and 24 a few hours later; suppose that the "confidence limit" of this test at the laboratory is 3.5 milligrams per 100 milliliters. Is this clinically significant?

To find out, we must examine the maximum range for both readings. For the 18 reading, the actual urea nitrogen content could be as high as 21.5. For the 24 reading, actual urea nitrogen could be as low as 20.5. The two ranges overlap. So the reported change is not necessarily of clinical significance. The change must exceed the sum of the maximum high-side and low-side deviations in order positively to indicate an actual change.

In addition to "confidence limit," three other terms must be understood in order to use and interpret laboratory results meaningfully:

Precision means the reproducibility of a test result. How close will I come to a particular reading if I do the test again? "Standard deviation" is a measure of precision. *Precision* must not be confused with *accuracy*.

Accuracy is something else entirely. It means the closeness of the measured value to the absolute value. Chief sources of inaccuracy are improper calibration of equipment, and inaccurate standards.

Inherent variability means the net contribution of unavoidable error sources. In a particular test, for example, different pipettes may be used, amount of diluent may fluctuate, samples may change chemically due to the time interval between sampling and analyzing. These (and many other sources) all add up to the inherent variability of a particular test. The goal of statistical quality control is to keep the confidence limit as close as possible to the inherent variability of the test method .

Isn't statistical quality control just a policing program? Don't laboratory technicians resent it? No. In fact, we have found the reverse to be true. It has a net positive effect on laboratory morale because it gives the people a target. Worker morale is perhaps the single most significant factor in maintaining a high test quality level.

Duplicate testing — with or without reference specimens — is another technic widely applied in the hospital laboratory. Duplicate testing — running two independent tests on separate samples from the same specimen — proves especially valuable in procedures that do not lend themselves to statistical methods. "Blind" specimens — from reference laboratories or from within the laboratory itself — provide yet another cross check on laboratory work as a whole. As a minimum, we try to run at least one reference specimen through each division of the laboratory each day.

Four sources provide the bulk of our outside reference specimens. They are: (1) American Society of Clinical Pathologists, which provides unknowns in every laboratory area and sends one or two samples per month to each subscriber; (2) College of American Pathologists, which sends each participant a batch of samples once a year, rates each laboratory and ranks it against the national average; (3) Dr. Sunderman's Proficiency Test Service, which supplies specimens in biochemistry and hematology and updates subscribers on latest recommended procedures for all tests; and (4) the New Jersey State Department of Health, which has a mandatory program in blood banking and serologic diagnosis of syphilis and voluntary programs in chemistry. One way to supplement all these is for the chief technologist to periodically split specimens, put a false label on the second and enter both into the routine testing procedure.

"Routine" is a key element in handling any

reference specimens. It makes no sense at all to give reference specimens to only the best technicians, or to flag them in any way. The real question is quality of the laboratory's *routine* work, which can be assessed only if the checking samples are handled routinely. Physicians can use this method to evaluate the laboratories they use.

Most laboratories which have developed written procedure manuals for their technicians have found this well worth the effort, from a training as well as from a "control" standpoint. For instance, our laboratory has a series of manuals, one for each division of the laboratory. Each technician and supervisor has a copy of the manual that applies to his area. The manual outlines not only every test procedure, but also every quality control procedure. Here, as in the manual on sample collection and handling, any changes in procedure must be made in writing. Depending on conditions and preferences in the individual laboratory, procedures may also be consolidated into a single manual or prepared in the form of cards.

In Biochemistry

Perhaps the simplest area in which to apply quality control programs is in biochemistry, since so much of the work is repetitive and the results quantitative. It is also the most important area since it typically accounts for a major portion of in-patient and outpatient test volume. The first step should be to establish a uniform serum control. This can be done by developing a serum pool within the laboratory itself, which is probably the least expensive method in terms of cash outlay. Reagent suppliers also offer stable serums, which guarantee a more uniform serum pool — with less effort — than most laboratories themselves can make. This "known" can then become the reference specimen for establishing confidence limits for all substances tested for in that serum. These should be charted and posted conspicuously. So long as results on this serum fall within prescribed confidence limits, the procedure is "in control."

Biochemistry also lends itself to frequent checking with "blind" specimens, although this approach is actually superfluous in overall operations, if a statistical quality control program is in effect. It is useful for spot checking and for monitoring new employees, however.

In Hematology

Quality control in hematology is more difficult. Though tests are still quantitative for the most part, technician skill and human judgment play a larger role. The differential blood count is a good illustration of this. To offset this, the laboratory should work to keep every other aspect of the procedure — method of sampling, sample preparation, equipment — perfectly consistent. Statistical technics are useful in hematology also, even if values are plotted as a daily average only. Parameters such as average hemoglobin, and erythrocyte count should remain fairly constant day to day, so any upward or downward trends over a period of a few days indicate that perhaps the procedure is going "out of control." True, this is retrospective. But it is useful.

An easier method is to average the Mean Corpuscular Hemoglobin Concentration (MCHC) or Mean Corpuscular Hemoglobin (MCH) and study it for trends. Choice of which to use depends on which test the laboratory routinely performs. Hemoglobin and erythrocyte count can be used to compute MCH. Hemoglobin and hematocrit can be used to compute MCHC.

Duplicate testing should also play a large role in procedures that do not lend themselves to statistical control. Routine coagulation work, for instance, should always be done in duplicate. This is most easily done by splitting samples from each specimen. If the deviation between them falls within confidence limits for that procedure, the result is accepted, averaged, and reported. If not, the reason is sought and corrected, and the test re-run.

Another useful procedure in hematology is to post charts showing the normal and abnormal values, so technicians can recognize the signs that indicate the specimen needs interpretation by a pathologist. Every workbench should

have charts such as the following posted in a handy place.

Check With Your Supervisor, If You Find:	
A. Total Count	above 25,000 below 4,000
B. Lymphocyte Count	Adult — 40 per cent Child — 60 per cent
C. *Any* Abnormal or Atypical Cells	
D. *Any* Nucleated RBC's	
E. Platelets	Increase Decrease Abnormal

Several new control, reagents, and reference solutions have recently been developed to aid quality control in hematology. Stabilized red cells are now widely available commercially, and stabilized particles are now available as reference standards in white-cell counting.

In Microbiology

Microbiology is a difficult area in which to apply quality control in the strictest sense of the word. Tests are almost exclusively qualitative, human judgement is the decisive factor, and the risk of contamination always exists. Strict adherence to procedures — in collecting and processing specimens, in preparing culture media and in identifying samples — is paramount. Morale of the staff is also critical; so it is important for supervisors and manager to work constantly with technologists.

Three specific procedures can also eliminate contamination, the prime source of error in microbiology. First: use selective or differential media — or controls — wherever possible. Second: incubate all plates for 24 hours prior to use. This will usually "grow out" any contaminants that many be present. Third: duplicate cultures can often be made from the same specimens as a cross check of the entire procedure.

Blood Banking

Several means exist for maintaining control over blood banking. Many are written into laws of various states. In addition, accreditation procedures are further advanced in blood banking than in any other laboratory area. Control in blood banking is especially important since the end product affects patient health directly. It is not just a number passed on to the clinician, but a life-giving fluid that enters the patient's system. Identification of the specimen and recipient must be positive. For this reason, at least three identifying marks should be checked before beginning any transfusion. The rule we use is: check patient name and hospital number plus at least one of the following: hospital room number, physician's name, patient's home address, sex, or age.

Typing and cross matching require care too. As a minimum, blood typing should be done at least twice on each specimen — by different people using different methods (direct and reverse grouping). Reagents should be checked on every test by using positive and negative controls. Cross matching should be done by a least three different procedures (Saline, Albumin, and Coombs).

Anatomic Pathology

This is the most difficult area to control systematically, so quality will stand or fall depending on how carefully the work is done. The paraffin block is only large enough to accommodate one number, for instance, so even cross-checking the specimen identification is virtually impossible.

Frequent use of unknowns, review of study sets, pathologists' attendance at seminars and other post-graduate trainer courses, and consultation opinions will help minimize errors due to human judgment in reading the slides. Consultations should be obtained on every specimen where there is even the slightest doubt.

Doubtless, new quality control methods will be developed for all areas of the laboratory. Today, however, enough experience is available to enable all laboratories systematically to maintain a high degree of quality control. Pathologists should welcome each new advance and utilize it. The physicians and patients we serve should insist that we do. The most potent quality control measure is, in fact, the diligence, care, and interest of the pathologists directing the laboratories.

530 New Brunswick Avenue

Here are reported two previously intractable cases of conglobate acne vulgaris successfully treated with gamma globulin.

Conglobate Acne Vulgaris

Associated With Low Levels Of Serum Gamma Globulin

Thelma Warshaw, M.D./Westfield

The occasional case of severe, treatment-refractory conglobate acne is a trying problem for all practitioners. Still worse, however, are the effects on adolescent patients. These include abscesses and cysts, violescent in color, which last for months at a time, sometimes discharging part of the thick mucoid contents of the lesions. The regime described below was developed because of previous total treatment failure in a 17-year old who had already been seen by half a dozen competent dermatologists. This treatment failure was actually an inability of the patient to withstand infection. Therefore, it was reasonable to assume that a defect existed in the patient's ability to produce immune antibodies. To determine this, serum electrophoresis studies were done on two patients with severe, treatment-resisted acne. After testing, the treatment program was altered.

A decade ago, Sutton and Asel[1] cited the adjunctive use of gamma globulin in severe acne. Morginson *et al.*[2] similarly reported treatment of five cases of pustular acne among twenty acne patients found to have hypogamma-globulinemia. Four of the five so treated showed improvement after gamma globulin therapy. Working along the same lines, Schaffer *et al.*[3] described a like experience.

This report, on two additional patients treated with gamma globulin, is presented to emphasize the selective value of this procedure. Some young people with conglobate acne do have hypogammaglobulinemia. Correction of this defect, when it is found, produces a marked clinical benefit.

Case One

A seventeen year old had continuous acne of the face, chest and back, for a period of three years when first seen. He had been treated with superficial x-ray to tolerance; oral methylprednisolone (Medrol®); triacetyloleandomycin (TAO®); triamcinolone (Aristocort®); lincomycin (Lincocin®); sulfamethoxazole (Gantanol®); and intramuscular autovaccine twice a week for over ten weeks. None of these treatments (in addition to the other topical remedies) caused any remission.

A culture and some antibiotic sensitivities' tests were done on the contents of one conglobate lesion. These showed staphylococcus aureus-coagulase positive. This organism was sensitive to Lincocin,® to penicillin and to Chloromycetin.® No culture was done for corynebacterium acnes since its presence in conglobate acne was assumed. Protein electrophoresis revealed the data shown in the table.

	Test Result Grams Per Cent	Laboratory Normal Range Grams Per Cent
Total protein	6.5	6.5 to 8
Albumin	59	52 to 68
Globulin-alpha 1	7	2 to 6
alpha 2	11.6	5 to 11
beta	14.7	8 to 16
gamma	7.7	10 to 22

Clinical courses with Chloromycetin were of no benefit. Gamma globulin (in doses of 10 cubic centimeters) was administered intramuscularly every two weeks for a series of four injections. Oral doses of penicillin G 800,000 units daily were begun concurrently and continued for four months. The clinical course was dramatic with complete resolution of conglobate lesions. There is still pigmentation at sites of old lesions, however, with some occurrence of comedones. Two months later gamma globulin (2 cubic centimeters) was given intramuscularly at each visit. Penicillin dosage was reduced to 400,000 units a day, for three months.

Case Two

A seventeen year old girl with severe conglobate acne gave a history of acne since the age of twelve. She had had extensive treatment including x-ray to tolerance, oxytetracycline (Terramycin®), oral estrogens and sulfamethoxazole (Gantanol®), topical treatment, and ultraviolet therapy. The serum electrophoretic study is shown below:

	Test Result Grams Per Cent	Laboratory Normal Range Grams Per Cent
Total protein	6.5	5.5 to 8.8
Albumin	65	58 to 65.5
Globulin—alpha 1	3	1.4 to 4.6
alpha 2	8.9	6.3 to 14.8
beta	13.3	6.9 to 12
gamma	9.8	7.9 to 17

The gamma globulin level was low, but not outside normal range for the laboratory. Six months later, an intramuscular course of gamma globuin (2 cubic centimeters) was instituted every ten days. To date, the patient has received six injections. Since the third treatment, there have been no new conglobate lesions, and old lesions have been involuting steadily. In addition to gamma globulin, this patient has had topical therapy with various soaps, sulfur, and so on, but there has been no administration of additional medication internally.

Discussion

In the pathogenesis of acne vulgaris, the bacterial flora appear to play a role. The consensus is that in acne, corynebacterium acnes is ubiquitous, while other organisms (staphylococcus albus, staphylococcus aureus, and some diphtheroids and coliforms) appear occasionally.[4] Even the fatty acids of sebum, when they leak into perifollicular dermis, may produce a sterile inflammatory reaction which might be misinterpreted clinically as infection.[5] Certainly the versatile antibiotics and sulfonamides are widely accepted in practice for control of infections in acne.[6,7,8] Only Smith *et al.*[9] have challenged the benefit observed from treatment with systemic antibiotics.

Even in such a prevailing climate (favoring antibiotic — sensitive bacteria as one factor in acne) other factors must be sought to account for antibiotic treatment resistant cases of conglobate acne. The two cases presented here represent one possible explanation. In one adolescent there was decided hypogammaglobulinemia; in the other, the gamma globulin level was low, but within normal limits. Since serum gamma globulin is made up of immune antibodies, a depressed titer is consistent with the picture of long continued infection in acne.

In these two clinical trials, gamma globulin was given to prevent recurrent infections in severe acne, over the long term.[10] In one patient, this was combined with oral administration of penicillin G to clear the immediate specific staphylococcus aureus infection, and the overall improvement was unmistakably dramatic. The second patient showed lesser laboratory findings but just as bad conglobate acne. Here, smaller quantities of gamma globulin, 2 cubic centimeters per injection, were given. This was done to determine what dosage range was necessary. The observed response in this instance was as good as the response to a higher dosage in the first patient. For conglobate acne, the effective dosage appears to be in the range between 2 to 10 cubic centimeter per injection — for a course of (at minimum) 5 injections. The higher dose schedule may conceivably be overwhelming for a patient with very depressed serum gamma globulin. Tentatively we intend to explore the lower dose schedules. Infection and the ancillary factors, while important, represent only one step in the long chain of cause and effect that lead to acne vulgaris.[11]

Summary

Two patients with conglobate acne have been presented. These were shown to have low gamma globulin titers in blood serum. These previously uncontrollable patients responded satisfactorily to treatment with gamma globulin intramuscularly in short courses of four and six injections at ten to fourteen day intervals. In severe, intractable acne vulgaris, serum electrophoresis studies should be done to look for hypogammaglobulinemia. Where it is found, low gamma globulin titers are a factor obstructing the effectiveness of conventional acne therapy.

Bibliography

1. Sutton, R. L. and Asel, N. D.: Southern Medical Journal, 52:515 (May) 1959

2. Morginson, W., Wood, D., and Burgess, L.: Archvies of Dermatology, 79:305 (March) 1959

3. Schaffer, L., Schwimmer, B., and Staricco, R.: Journal of Investigate Dermatology, 30:97 (March) 1958

4. Shehadeh, N. and Kligman, A.: Proceedings of the International Congress of Dermatology, (September) 1962 (2:969)

5. Jarrett, A.: Proceedings of International Congress of Dermatology, (September) 1962 (2:963)

6. Cohen, E. L.: Proceedings of International Congress of Dermatology, (September) 1962 (2:979)

7. Sulzberger, M.: Proceedings of International Congress of Dermatology, (September) 1962 (2:998)

8. Cornbleet, T.: Archives of Dermatology, 89:144 (January) 1964

9. Smith, M. A., Waterworth, P., and Gurween, M.: British Journal of Dermatology 74:86 (March 1962)

10. Barrett, B. and Volwiler, W.: Journal of the American Medical Association, 164:866 (June 22) 1957

11. Warshaw, T. G.: New York State Journal of Medicine, 58:2060 (September 15) 1958

519 East Broad Street

This study from the United Hospitals of Newark calls attention to the seldom-thought-of role of upper airway obstruction in cor pulmonale.

Acute Cor Pulmonale With Congestive Heart Failure*

A Case In Chronic Upper Airway Obstruction And Marked Obesity*

Elizabeth A. Johnson, M.D. and John H. Donnelly, M.D./Newark

Hypoventilation secondary to an upper airway obstruction caused by hypertrophied tonsils and adenoids may lead to pulmonary hypertension, cardiomegaly and congestive heart failure. Eight children have been the basis of reports by Luke, *et al,*[1] Menashe, *et al,*[2] and Noonan.[3,4] In these children, removal of the obstruction led to a complete regression of symptoms.

The following is a case report of a child first seen at age seven with complaints of obesity and episodes of "strangling" with cyanosis when supine, relieved by an upright or prone position. The hemodynamic data two years and four months following tonsillectomy and adenoidectomy have failed to revert to normal.

At 21 months of age, this little boy was admitted to another hospital because of an upper respiratory infection associated with a generalized fine maculopapular rash and a nutritional anemia. At that time, the tonsils were noted to be hypertrophied and congested. At the age of 27 months he was admitted to the Babies' Hospital because of acute tonsillitis, bronchitis, and nutritional anemia. His weight then was 28 pounds. When he was six years old, he had a right upper lobe pneumonia.

At the age of seven he was seen in the out-patient department of the Babies' Hospital because he had gained an excessive amount of weight in the previous year. He then weighed 97 pounds (over the 97th percentile) and was 49 inches tall (75 to 90th percentile). When he lay flat, he became cyanotic and would begin to strangle. He preferred to sleep in a sitting position or lying on his stomach.

Eight months later, he entered the hospital because of a cough of one week duration and difficulty breathing. This had become increasingly worse in the preceding four days. Physical examination revealed a lethargic, obese, intelligent boy with rapid, shallow respirations,

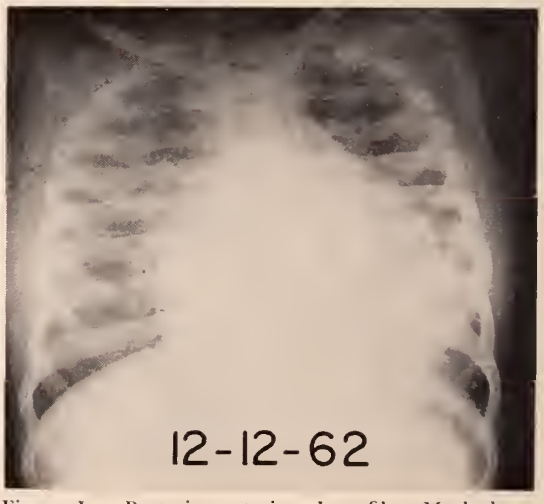


Figure Ia. Posterior-anterior chest film. Marked cardiomegaly is associated with congestive heart failure.

who fell asleep periodically during the examination. The heart rate was 160 and there were bilateral fine rales in the chest. The venous pressure was 420 millimeters of water. The hemoglobin was 9.3 grams. Chest x-ray indicated marked cardiomegaly (fig. Ia). The electrocardiogram showed a right ventricular and right atrial hypertrophy (fig. 2). He was treated with penicillin and digitalis with improvement over several days. On one occasion, prolonged apnea was observed secondary to the administration of oxygen. Auscultation of the heart revealed accentuation of the pulmonary second sound and a grade I systolic murmur in the pulmonary area. Digitalis was discontinued following the acute phase of his illness. The chest x-ray showed the heart size to be markedly diminished after treatment for congestive heart failure (fig. Ib). He con-

* This work is from the Presbyterian Hospital Unit and Babies' Hospital Unit of United Hospitals, Newark, New Jersey. Dr. Johnson is Associate Chief, Cardiac Catheterization Laboratory, Presbyterian Hospital Unit, United Hospitals; and Dr. Donnelly is Chief of the Cardiac Catheterization Laboratory, Presbyterian Hospital Unit, United Hospitals, Newark, New Jersey.

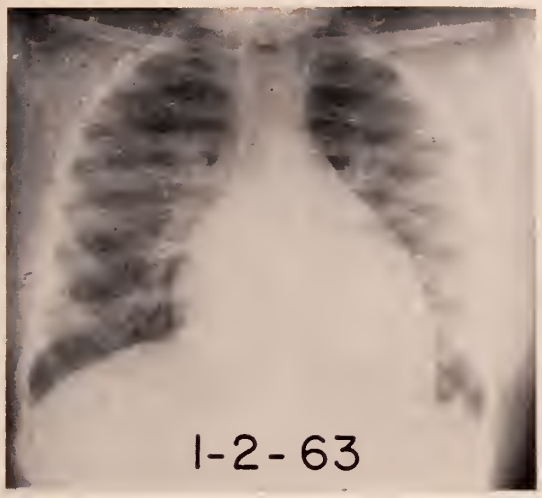


Figure 1b. Posterior-anterior chest film. Residual cardiomegaly with very prominent pulmonary artery segment after resolution of heart failure and before tonsillectomy and adenoidectomy.

tinued to have episodes of cyanosis. A month after admission, right heart catheterization was done. All pressure curves showed wide variations with respiration indicating increased respiratory effort. The arterial blood oxygen saturation was 74.5 per cent.

The oropharynx was limited in size by the enlarged palatine tonsils, the nasopharyngeal airway was markedly obstructed by enlarged adenoids. The lingual tonsils were not unduly prominent. The boy had thick obstructive speech sounds. Tonsillectomy and adenoidectomy were done a few weeks later. Following the removal of the obstruction the patient's breathing was no longer labored. He was then able to sleep on his back comfortably. No further cyanotic episodes were noted. An electrocardiogram taken 6 weeks following the surgery showed normal P waves and less evidence of right ventricular hypertrophy. Right heart catheterization was repeated 6 weeks later. The wide variation in pressures was no longer evident. The pulmonary wedge pressures were normal and the pulmonary artery pressures were slightly elevated. The arterial saturation was normal.

He was seen at intervals over the next two years and had no illness during this time except measles. He continued to have an enormous appetite and to gain weight. At age ten he weighed 129 pounds (over 97th percentile) and was 58 inches tall (90th percentile). He was asymptomatic but sedentary. Auscultation of the heart continued to reveal accentuation of the pulmonary second sound and a faint systolic murmur. The electrocardiogram had become normal (fig. 2). Right heart catheterization was then repeated and showed that the pulmonary artery and right ventricular pressures were still slightly elevated and not significantly changed in a two year period. There were definite elevations of pressure in the pulmonary wedge, right atrium and superior vena cava. The right ventricular end-diastolic pressure was distinctly elevated.

The mechanism of hypoventilation secondary to chronic upper airway obstruction by hypertrophied tonsils and adenoids was described by Menashe,[2] who showed that there is a

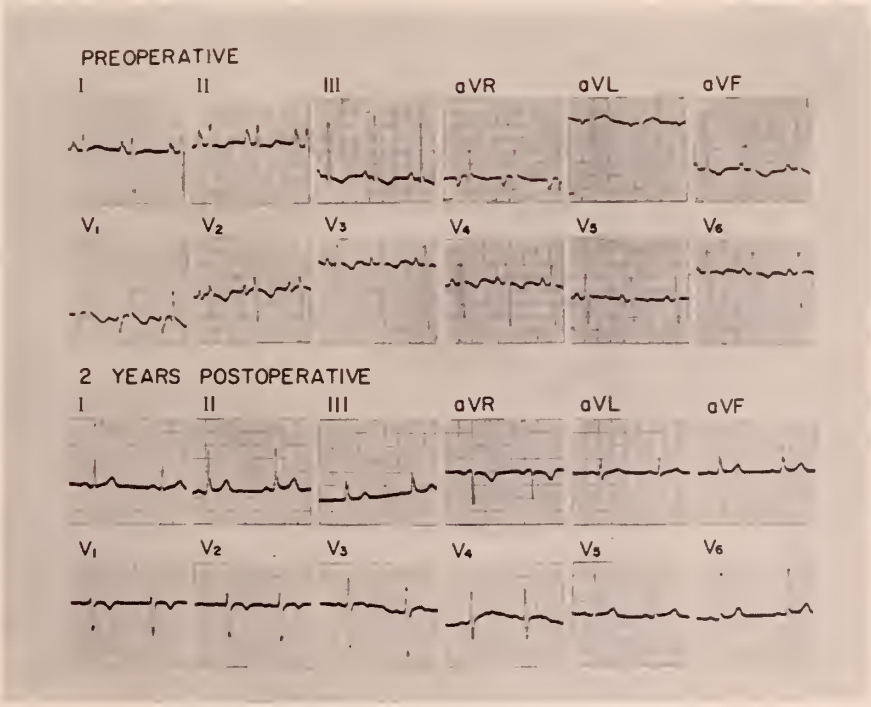


Figure 2. Electrocardiograms before and after tonsillectomy and adenoidectomy. Note the reversal to normal of the tall pointed P waves, the tall R wave in V_1 and the R/S ratio in V_6.

reduction in ventilatory capacity followed by carbon dioxide retention and varying degrees of hypoxemia which result in pulmonary hypertension and cor pulmonale. Congestive heart failure is commonly ushered in by an acute respiratory infection[5] and this was the apparent course in this patient. That the symptomatology was secondary to upper airway obstruction by enlarged tonsils and adenoids is shown by the dramatic improvement following their removal. The arterial saturation rose from 74 to 99 per cent. Two years later there was a striking change to normal in the electrocardiogram. The cardiac silhouette on x-ray examination had become remarkably smaller.

Two years later the pulmonary second sound is still markedly accentuated and is consistent with pulmonary hypertension. Cardiac catheterization two and a half years after removal of the tonsils and adenoids continues to show mildly elevated pulmonary artery pressures. This is in contrast to two reported patients[2] in whom the pulmonary artery pressures reverted to normal at three months and nine months after tonsillectomy and adenoidectomy. The persistence of pulmonary hypertension in children with the Pickwickian syndrome was noted by Cayler, *et al*[6], after the hypoxia was corrected. Several reasons were given, such as "persistent hypercapnia, regional vasoconstrictive responses, secondary proliferative changes in the pulmonary vessels, or possibly pulmonary embolic, or thrombotic complications."

Two years later the pulmonary wedge pressure (which had been normal on the catheterization 6 weeks following tonsillectomy and adenoidectomy) showed an abnormal rise to 15 millimeters of mercury at rest and 18 after exercise. There have also been significant increases in the right ventricular end-diastolic pressure and in the right atrial and superior vena cava mean pressures. These findings indicate the presence of myocardial dysfunction, but the specific factor that is responsible is not known. An important consideration is the presence of a disturbed ventricular compliance due to dilatation and overstretching of the ventricles which occurred when the child was in severe congestive heart failure. Another consideration is that the severe hypoxemia which was initially present could have resulted in poor myocardial perfusion with irreversible changes in the ventricular muscle.

The marked obesity (one of the presenting and still a residual sign in this patient) is probably an additive factor. Marked obesity was present in two previously reported cases; however, following tonsillectomy and adenoidectomy, it disappeared in one case. Our patient had the clinical features of the Pickwickian syndrome described by Burwell,[7] which included somnolence, cyanosis, periodic respiration, right ventricular hypertrophy and right ventricular failure. One cardinal feature, the secondary polycythemia, never developed, although it was reported in one other case.[2] The dietary and exercise habits of our patient have not changed since tonsillectomy and adenoidectomy. Upper airway obstruction was probably instrumental in starting the exercise and dietary pattern which, up to the present time, has not altered greatly.

Summary

1. A 7-year-old boy had severe respiratory difficulty secondary to hypertrophied tonsils and adenoids. He developed distinct cyanosis, marked cardiomegaly, and congestive heart failure. After tonsil and adenoid removal, he had disappearance of most symptoms, remarkable diminution of cardiomegaly and reversion of the electrocardiogram to normal.

2. This boy was markedly obese. This suggests an additional factor for hypoventilation. The obesity has persisted on follow-up two years later.

3. Hemodynamic studies two and a half years later reveal that pulmonary hypertension is still present. Reasons for failure of complete reversal are discussed.

Bibliography

1. Luke, M. J., Mehrizi, A., Folger, G., and Rowe, R. D.: Paper presented at Annual Meeting of American Pediatric Society (1965)

2. Menashe, V. D., Farrehi, C., and Miller, M.: Jour. of Ped. 67:198 (1965)

3. Noonan, J. A.: Annual Meeting of American Pediatric Society (1965)

4. Noonan, J. A.: *Circulation* 32:164 (1965)

5. Report of Expert Committee on Chronic Cor Pulmonale, *Circulation* 27:594 (1963)

6. Cayler, G. C., Mays, J. and Riley, D.: *Pediatrics* 27:237 (1961)

7. Burwell, C. S., Robin, E. D., Whaley, R. D. and Bickelmann, A. G.: Am. J. Med. 21:811 (1956)

27 South Ninth Street

Lithium Carbonate In Manic-Depressive Psychosis

The United States Public Health Service has just issued a report on the use of lithium carbonate in the affective psychoses. This preparation has been found to check the intense excitement of the manic and tranquilize the irritable patient. The Public Health Service also presents reports from Denmark which suggest that lithium seems to act as a preventive of both manic and depressive attacks. If further research bears out present findings, lithium will become an important weapon in the fight against this disabling mental illness.

However, in contrast to lithium's action in mania, a question remains about its usefulness in acute depressive episodes. In a pilot study with manic patients, the researchers designed a double-blind system with code number for lithium and for placebos so that the psychiatrists evaluating the patient did not know when lithium was being given. Manic-depressive patients improved markedly while on the drug, but became excited as soon as they were switched to the placebo.

The Institute (National Institute for Mental Health) cautioned that lithium is a powerful drug. An overdose can be serious. It is essential to make frequent blood checks both when the patient is started on the drug and also during therapy. On "normal" doses, there are virtually no side effects.

In addition to its value as a treatment, lithium promises to be almost equally valuable as a research tool. Scientists in Europe and Australia have employed it sporadically for the treatment of manic-depressive reactions for the past eighteen years, but it has been studied seriously in the United States only in the past five or six years. At the National Institute for Mental Health, studies are under way with reference to the role of electrolytes, the part played by the adrenal gland and the effect of the hormone norepinephrine.

In the body, all of these biologic processes interact with one another. Lithium, which affects behavior in a predictable and reversable fashion, may help in mapping some of the complex biochemical relationships in mental illness and perhaps give information about the physiologic and biologic processes which determine normal as well as maladaptive behavior.

To speed work on this disease, Dr. Stanley F. Yolles, Director of the National Institute of Mental Health, has formed a National Ad Hoc Committee on Affective Disorders. Made up of prominent scientists, the Committee will stimulate research in this field, and focus on important problems, and thus help decrease the mass of suffering and suicides associated with depressive illness.

Every one talks about accident control programs, and here's one member who suggests how we can do something about it.

Disaster Control—Needed Now

William A. Dwyer, Jr., M.D./Paterson

In this state, each year, 1,100 lives are lost, 112,000 people are injured, and $96,000 in property damage is caused by the catastrophic effects of highway accidents. These figures do not include lives lost or injuries inflicted by other natural disasters. These figures, in a single year, far exceed the casualties of our entire Vietnam operation from 1954 to 1964. Yet, the general public pays scant attention to pleas for safety in driving and apparently cares less about the hapless victims of these daily disasters.

We, of the medical profession, are not less guilty of a very casual attitude toward these victims or, indeed, of the victims of any disaster. Repeatedly, studies[2] of the emergency rooms in our hospitals have turned up glaring deficiencies in equipment, layout, and, most serious of all, staffing. Too often, there are time lapses in the handling of the injured when they do arrive at the hospital. Transportation of the injured from the scene is left to whatever the area provides — ranging from excellent first aid squads to untrained personnel employed by a local undertaker. In this day and age of superb communications, the usual way that we become aware of any accident or calamity is the arrival of the first patient at the hospital door. Thus, it would seem well worth expending a certain amount of money on an organization that could provide some measure of control over the effects of disasters so as to improve communications with the hospitals, and to insure both safe, rapid transportation of casualties and prompt, efficient treatment for them.

Ideally, this organization would be dovetailed into the every day workings of local and county governments so as to deal with our routine automobile calamities rapidly and with minimum confusion. In the event of a major disaster, the volunteer components of this organization would be mobilized according to a predetermined plan by the appropriate local agencies. If a major disaster were beyond the capabilities of an individual municipality, the county organization would be asked to provide coordination between municipalities, ensuring the flow of needed men, supplies, and equipment from less affected areas to the more seriously affected ones, without completely stripping any one community. In any very large disaster, the state would provide overall coordination.

In New Jersey, there exists a body of laws and an organization — Civil Defense — that purports to provide a mechanism for controlling the effects of disaster. Federal and state governments have expended millions of dollars on this organization. Its supporting legislation is fairly well written. Yet, neither local government nor the general public have paid much attention to the potential usefulness of Civil Defense. Today, it is geared almost exclusively to deal with disaster resulting from nuclear explosions. Its personnel rosters are so depleted that it is poorly equipped to deal even with that. This organization and the relevant laws do not even attempt to deal with the control and management of the daily disasters taking place on the highways despite the obvious vastness of the problem.

On the one hand, there exists an organization

whose purpose is to provide support in the event of disaster; on the other is a series of disasters which are totally ignored. This makes no sense at all. Why is it tolerated? There are at least three factors. *First,* local police, fire, and ambulance squads are jealous of their functions. They are "professionals" at their job. Of course, most rescue squads are volunteers, but they spend many hours training to become proficient at first aid and rescue work. Civil Defense municipal directors are politically appointed, tend to change frequently, and rarely possess knowledge of police, fire, personnel, or first aid requirements.* Their efforts are largely ignored by the "professionals."

Second, the ability to mobilize Civil Defense personnel is a matter of hours, whereas the "pros" are always available. If there is a highway bus accident, the police and resuce squads would have the whole matter resolved and all casualties in the hospital by the time the local Civil Defense people had reported for duty.

Third, is the general antipathy toward Civil Defense. Here, the layman's image is that of a bunch of "kooks" who are just waiting for a war to break out so they can gain status. The fact that there are many in Civil Defense who have been through war and disaster, and who dread the consequences of unpreparedness, does not change this popular image.

Any organization which is rarely employed is like a tool that is not used frequently. The moving parts develop rust and tend to "bind;" the edge becomes dull and won't cut. This is the situation that Civil Defense is in at present. An example is provided by the winter storm of 1962. A shore community hospital was in danger of being flooded at high tide. Civil Defense, knowing the weather situation, apprised the various agencies of this danger and ordered evacuation. The hospital refused to comply. At high tide, it was flooded and its evacuation had to be carried out in worse weather, in the dead of night. The life of one patient was lost in the process. Here, the "professionals" ignored an ample warning because it originated from Civil Defense. But the Civil Defense people are also responsible for the loss of that life, because they did not realize that they could make the hospital comply with their order by invoking the disaster laws of the state. The edge of the tool had become dull.

There are many more big and little examples of this sort. If there is a necessity for an organization of this kind (and there is ample proof that there is), then it must be used regularly. Our highways daily provide enough work for it, even without using Civil Defense in terms of large disaster.

Civil Defense must be dovetailed into the daily workings of the professional departments of a municipality. Its directors must be knowledgeable people rather than politically appointed amateurs. Its lines of communication must be quick and sure. There are many ways in which this organization can be effectively dovetailed into each community. Here is one suggestion:

Let the police chief in each municipality be designated as the man in charge of "routine" disasters (such as two or three car accidents). Where fire is the principal disaster element, the responsibility should be the fire chief's. These men, in turn, can assume responsibility for safe and swift evacuation of the injured to a hospital, and for informing that hospital *via an established communications network* that injured are on their way. This responsibility may be delegated to subordinates as needed in dealing with small accidents.

In an escalated "routine" disaster, the chief should assume responsibility personally. This might be the situation in a multiple alarm fire or an accident involving ten or more people. Under these conditions, he must determine that a cleared traffic route exists for evacuation of the wounded; that at least one first aid post is established at the scene; and that a primary and secondary hospital are named and notified. He must see to it that the seriously injured are brought to the primary hospital, and the less seriously injured are brought to the secondary hospital. If necessary, to assist in such triage, he may call on the primary hospital to send a physician to the scene as triage officer.

At the time he is notified of the disaster, the chief should promptly notify the Civil Defense Director that a situation has developed that is out of the ordinary. This will make him aware of the situation so that key Civil Defense personnel can be put on a stand-by alert basis.

If, in the opinion of the chief, the situation is beyond what his professional staff can handle by itself, he should request the Civil Defense Director to mobilize

* These are the author's views and do not, of course, necessarily reflect the position of this JOURNAL or our Society.

the necessary types of personnel and supplies. At this point, the Civil Defense Director in the local situation would notify the County Coordinator, who would put *his* key staff on a stand-by basis.

In the event of a major disaster, the County staff would provide coordination of supplies and men *via* the Civil Defense communications' network. Local people, however, must retain tactical control of the situation, unless, and until, the problem involves more than one community. At this point, the County Coordinator would assume overall tactical control.

If heavy weather warnings are issued *via* the State Civil Defense network, both the local police chief and the Civil Defense Director would be notified and would have the responsibility of placing their staffs on a stand-by alert basis.

This plan embodies many features that are supposedly present in existing Civil Defense tables of organization. What is missing in the Civil Defense organization is: (1) the actual implementation of these mechanisms; (2) a well defined and inescapable boundary line, beyond which the next level of aid must be called in; and (2) effective (i.e., men with experience in police, fire, and rescue technics and requirements) local Civil Defense Directors whose responsibility is confined to training personnel, providing coordination between volunteers and professionals when needed, maintaining an effective communications network to the county level, and a meaningful inventory of municipal resources and utilities. They should *not* have the responsibility for tactical management of a disaster situation. This is better left in the hands of experienced personnel.

In summary, what is needed is a coordinated effort on a local level between the presently available forces and Civil Defense. The Civil Defense organization on a local level should be organized under the direction of an individual with specific knowledge of disaster problems and personnel (e.g., a retired police or fire chief, or a retired military officer). Its roles would be: a) to provide daily coordinated communications between police, fire, ambulance, and hospital services; b) maintain an inventory of available supplies and equipment in the community so that information as to quantity and kind is available 24 hours a day; and c) act as a training and recruiting organization for reserves for the police, fire, rescue, and ambulance squads. In this latter capacity, it would also provide these reserves as needed in the event of disaster. When called upon, of course, these reserves would act under the authority of the regular professional forces.

On a County and State level, the provision of an effective communications net, support for training activities, and overall coordination of efforts between municipalities would be essential — the latter especially in times of heavy storms and hurricanes.

To adapt this idea to the existing legal structure, certain modifications in the law will have to be enacted by the legislature. Chief among these will be a redefinition of the role of the Civil Defense Director and of the qualifications for those holding such an office. There will also be a need to redefine the usual role of the Civil Defense organization itself and to outline clearly those points at which "ordinary" routine becomes a beginning concern of the Civil Defense organization, a direct concern, and finally an escalated concern.

Better provision might be worked out with the National Guard and Army Reserve Units to provide assistance with the manning of the Packaged Disaster Hospitals. In the ordinary disaster situation, this ought to be possible without affecting their overall mobilization potential.

This is a beginning of an organization that could well be of life-saving benefit to any or all of us, and it would at least be providing some return on the millions of tax dollars being poured into it.

Bibliography

1. Bureau of Motor Vehicles, Statistics Department, Personal Communication

2. Shaftan, G. W.: "Disaster and Medical Care," *J. TRAUMA*, 2:111-116, 1962

3. Shaftan, G. W. and Gollance, H.: "Disaster and Medical Care — A Lesson Learned," *J. TRAUMA*, 3: 199-205, 1963

4. New York City Police Department: *Operations Manual For Disasters*. Bureau of Printing, New York. 1962

412 Park Avenue

Here is a vignette of a little known physician who became a hero in his own time.

A Physician On The Glaciers

A Note on the Life of E. K. Kane, M.D.

Robert K. Spiro, M.D./Bloomfield

Physicians seldom become nationally known figures. Elisha Kent Kane, M.D. was a medical practitioner who was deservedly catapulted into national fame just before our Civil War — and who then was almost lost to the pages of history. He established technics of Arctic exploration that were used well into the twentieth century.

Born in 1820, he matriculated at the University of Virginia, and was interested in natural history and geology. He planned to become a civil engineer. At eighteen, he was sorely afflicted with rheumatic fever, and sustained valve damage. For a period, he plunged into a depression and withdrew from the world. He gradually roused himself from the doldrums, returned to college, and modified his courses to study medicine. He became the foremost student in his class, in spite of the fact that he frequently slept in the orthopneic position, because of his cardiac status. In sharp contrast to his period of depression following illness, he now burned with activity, as if no moment in his limited lifespan was to be wasted.

His father, a well-connected attorney and public servant, knew of a United States mission to China to open diplomatic and trade relations. He secured a position for his son as Naval Surgeon and as physician to the Embassy. Kane sailed on the first of his travels, May 1847, on the frigate *Brandywine*. The journey, beset with delays, lasted two and one half years, calling at South America, Africa, Egypt, Greece, Italy, Switzerland, and France. Kane would recall the Swiss glaciers later when he saw larger ones in Greenland.

His "routine" naval duties, not very military, were disappointing, for he was sent to Africa to help suppress the illegal slave trade. The next year, during the Mexican war he carried a special message from President Polk to General Scott in Mexico. While bearing the message, he added to his stature by preventing the murder of several captured Mexican officers. He returned to his native Philadelphia in 1848, and was awarded a sword by the citizenry.

Kane then requested assignment to the Philadelphia Naval Yard, hoping to regain his failing health by staying in a familiar climate. He was, however, sent to sea aboard the ship *Supply,* cruising the Mediterranean to South America. His health continued poor.

Seven years prior, Kane had set forth to lead a vigorous life. Fame had briefly touched him, and he had visited three continents and one battlefield. Now, at the age of 30, he joined the Coast Survey and soon began a new phase of his life. The prelude of the play had been lived.

The Northwest Passage, a presumed water route across the top of the Americas, had been a dream of Europeans since Magellan reached the East by sailing south of the Americas. Several expeditions had unsuccessfully attemped to find the route. They had contributed, however, scientific observations and data, and mapped large and previously unknown areas.

The British Admiralty, in 1845, sent an expedition, well equipped with competent men, of two vessels, the *Erebus* and *Terror,* to accomplish the "Passage to the Pacific." Commanding was Sir John Franklin. However, the

Arctic defeated it. By 1874, two years after the expedition had set out, no word was forthcoming. Fear for the safety of the expedition developed. A great Arctic manhunt was started and several expeditions unsuccessfully tried to find Franklin and his men. In 1850, an American unit was formed to search for Franklin and his crew. Kane volunteered and was designated senior medical officer of the *First U.S. Grinnell Expedition,* so named because Henry Grinnell of New York, a wealthy merchant, had donated the two ships for the journey.

No direct contact with the Franklin expedition was established by the United States hunt, for their vessels were ice-locked most of the time. Franklin's first wintering spot, however, was found. Kane spent much time observing the Eskimos and learning to live and eat like them. He observed that raw foods could be eaten and were anti-scorbutic.

In October 1851, the expedition returned to New York. Once home, Kane began a lecture tour to support a private second expedition. He again secured the use of the Grinnell ship, *Advance,* and sailed on May 3, 1853 in command of the *Second U.S. Grinnell Expedition* in the search for Sir John Franklin.* He was to approach the problem of polar exploration in a new fashion which would set the tone for polar exploration until the middle of the twentieth century and "Operation Deep Freeze." He determined to establish a secure base far up Smith Sound and then, using Eskimo sleds, to trek over open ice to the sea. Kane felt this was a wise technic for ships became ice-bound, and thus helpless and worthless. Like the Eskimos, he determined to live in igloos and eat the food of the land and water. These were new thoughts and he was staking his life on the validity of these new ideas. His party penetrated Smith Sound to latitude 78 degrees 41 minutes north before being frozen in.

He described the Humboldt glacier. He set up supply depots so that sled teams could reconnoiter further north. An observatory was set up for meteorologic study. Various explorations were made illustrating Kane's superb practical leadership. The Humboldt glacier was crossed by a team at a place which they named "Cape Constitution." They erroneously believed the open water which they found here was the polar sea. They had come 81 degrees latitude 41 minutes north, closer to the Pole than any other man before. Their ship, however, was still ice bound.

Kane now disclosed his own firm but practical nature. He felt he could survive another winter, but decided not to impose his will. He said he would permit the men who wanted to leave for home to do so. He added that if those who planned to leave should have any problem, they would be welcomed back "as brothers."

The ship was fitted out as an igloo with good insulation of moss and turf. It was shortly thereafter pilfered by wandering Eskimos. Kane decided to end stealing problems swiftly and show the Eskimos that his men were not weak. He sent some of his men to the Eskimo camp and took three wives as hostages. Thereafter, Kane and the Eskimos quickly came to a treaty of mutual help and friendship which was never broken.

Spring came and the ship was still frozen solid in the ice. Kane then began a careful retreat with sled and sick men traveling 1300 miles in 83 days. His men received great help from the Etah Eskimos.

He was feted as a national hero when he returned home. His health again began to fail. He sailed to England for rest, but the climate was inclement and he went south to Havana for better weather. He died there two months later in 1857. Dr. Kane never married.

The contributions to polar exploration by Elisha Kent Kane, M.D. include:

a. Planning and use of advance bases, and major bases to supply them: the concept of the line of supply. This technic was used for many years, particularly by Peary and his successful dash to the North Pole.

b. Realization of the anti-scorbutic effect of raw meat, stressing the importance of living off the land as do the natives.

c. Exploration and charting of more than 700 miles of the Northwest Greenland coast with repeated meteorologic and magnetic data.

59 Fremont St.

* Sir John Franklin and his crew were never found and presumably all perished in the expedition. Occasionally, parties have been sent out to look for the remains — one as recently as 1960 — but nothing was ever found.

STATE ACTIVITIES

Trustees' Minutes

March 19, 1967

A regular meeting of the Board of Trustees was held on Sunday, March 19, 1967, at the Executive Offices. For further information, detailed minutes are on file with the Secretary of your component society. A summary of the significant actions follows:

Vincent Paul Butler, M.D. . . . Adopted the following memorial resolution and authorized a contribution, in the amount of $50, to the Medical Student Loan Fund in memory of Dr. Butler:

VINCENT PAUL BUTLER, M.D.
1893 — 1967

Whereas, Almighty God has seen fit to summon from our midst His good servant and our beloved colleague, Vincent Paul Butler, M.D.; and

Whereas, with singular distinction through his entire career he served well The Medical Society of New Jersey and reflected honor upon it by his services both as a member of the Judicial Council and as President; and

Whereas, as a member and as Secretary of the New Jersey State Board of Medical Examiners he contributed greatly to the honor of the medical profession and the welfare of the people of New Jersey; now therefore be it

RESOLVED, that the Board of Trustees of The Medical Society of New Jersey records its grief at his passing; and be it further

RESOLVED, that a copy of this resolution be spread upon the minutes of this meeting, and that another copy, suitably prepared, be presented to his bereaved family.

Board of Medical Examiners . . . Submitted the following candidates for appointment to the Board of Medical Examiners for the term previously filled by Dr. Vincent P. Butler (1967-1970): (The Board had nominated Dr. Butler to succeed himself, and submitted his name — with others — to the Governor, under date of January 31st. In view of Dr. Butler's death, candidates for this term were resubmitted.)

Matthew E. Boylan, M.D., Jersey City
John J. Bedrick, M.D., Bayonne
Isaac N. Patterson, M.D., Westville

Tri-Partite Conference Committee . . . Adopted two statements prepared by the Tri-Partite Conference Committee, with the New Jersey State Nurses' Association and the New Jersey Hospital Association, dealing with closed chest cardiac resuscitation. One said that in an emergency properly qualified registered nurses may initiate resuscitation; the other defined cardiac arrest, indicating resuscitation should be attempted by the first qualified individual in contact with the victim, and describing what may be considered adequate training to become properly qualified.

OLT Policy Consent Form . . . Approved the following consent form concerning coverage by MSNJ's OLT policy and recommended that it be sent to the component societies for consideration and acceptance:

In an effort to prevent or avoid involvement by county medical societies as defendants in civil actions based upon libel, slander, defamation of character and other related matters of law which might not be in the best interest of such county societies, and which might in turn involve The Medical Society of New Jersey, by association, as well; and, in an effort to insure that the insurance coverage provided MSNJ, its components, officers, and employees by a rider to its OL&T policy is and will be used in the best interest of those covered, without abuse, this component society voluntarily agrees hereby to be guided hereafter by the advice and assistance of MSNJ, through its Board of Trustees, as a condition precedent to such coverage of this component society by said liability insurance policy, in all or any controversial matters involving such liability coverage.

Golden Merit Award Candidates . . . Approved the recommendation of the Council on Public Relations of a list of 39 candidates from 13 component societies for the 1967 Golden Merit Award.

Medical Student Loan Fund Plaques . . . Approved the recommendation of the Council on Public Relations that suitable plaques be installed in the Executive Offices, listing the bicentennial donors to the Student Loan Fund.

Council on Public Health . . . Considered three matters introduced by this Council: (1) "kid boxing"; (2) Sex Education; and (3) Venereal Disease Control.

(1) Kid Boxing . . . Approved the following advisory recommendations in response to a request from the State Deputy Athletic Commissioner:

(a) That MSNJ concur in the requirement of the New Jersey Amateur Athletic Union that a minimum age of 16 be set for actual contests where decisions are to be given, provided that other and more important considerations are regularly observed and enforced.

(b) That a complete physical examination be given to each potential contestant, with special attention to heart, good vision in both eyes, sound reflexes, normal hearing, and proportionate anatomical development.

(c) That in taking the history, particular stress be placed on previous injuries (especially to the head) *and a history of convulsive disorders.*

(d) That protective head gear be required of all participating in such contests; and that competent and constant supervision be extended at all times — to include even matching of contestants on the basis of age, height, weight, experience, and the like.

(e) That any contestant who suffers a knockout be debarred from further participation in boxing until he has had a thorough physical examination, particularly with reference to head injuries, and has had full clearance from the physician in charge of the case.

(f) That the weight of gloves should be *at least* 12 ounces.

(g) That the duration of rounds should be one minute, with one minute between successive rounds, with a maximum of three rounds in any exhibition match for each contestant.

(2) Sex Education . . . Approved the following recommendation of the Public Health Council (a substitute for one offered by the Child Health Committee):

That MSNJ — through its official contact with the New Jersey Congress of Parents and Teachers, the New Jersey Association of School Physicians, and the New Jersey Association of School Nurses — attempt to determine if, in their opinion, adequate sex education programs are being offered in the public schools; and, if not, to solicit constructive recommendations from these organizations as to how MSNJ might help to improve the caliber of such programs.

(3) Venereal Disease Control . . . Approved two recommendations of the Public Health Council. These are substitutes for one offered by the Woman's Auxiliary of MSNJ concerning the investigation of venereal disease control teaching in New Jersey schools.

(a) That MSNJ re-emphasize its continuing strong support of any and all effectual educational measures to accomplish the control and elimination of venereal disease.

(b) That any further action on the part of the Society toward working with the educational system of the state in venereal disease control be deferred until the reports requested of the New Jersey Congress of Parents and Teachers, the Association of School Physicians, and the Association of School Nurses are received and evaluated.

Postage Meter Stamp . . . Approved the following recommendation of the Public Health Council, prepared by the Special Committee on Air Pollution Control:

That MSNJ purchase an advertising plate to be affixed to the postage meter which would carry the slogan "Help Keep The Air Clean" — or another appropriate clean air slogan — to be used on all outgoing Society mail.

New Jersey Abortion Laws . . . Approved the following recommendation of the Public Health Council, offered by the Committee on Maternal and Infant Welfare:

That no action be taken by MSNJ toward liberalizing the abortion laws of New Jersey.

Committee on Disaster Medical Care . . . Approved the following recommendations of the Committee:

(1) That the Emergency Medical Care Program approved by the National Research Council be implemented in every hospital in New Jersey.

(2) That signs showing the way to hospitals be placed at specific mileage intervals on highways, on all toll roads in New Jersey; and at toll booths and exits.

(3) That the New Jersey Hospital Association encourage member-hospitals which have received Hill-Burton funds to explore the availability of additional federal funds for ambulance service and equipment.

(4) That a standard textbook for the training of physicians in emergency care and disaster situations be adopted, such as *The NATO Handbook on Treatment of War Emergencies or Fractures* and *Soft Tissue Injuries* by the American College of Surgeons.

(5) That MSNJ petition the appropriate state authorities to develop an emergency telephone service on highways, developed along the lines of the New York City pilot study program.

(6) That the Board approve a model "ordinance for ambulance service" (as recommended by the American College of Surgeons' Committee on Trauma, National Safety Council, and the Federal Department of Health, Education, and Welfare) and that the legislature be petitioned to enact this throughout New Jersey.

(7) That the responsibility for training ambulance attendants be assumed by the component medical societies in New Jersey.

(8) That the name of the Committee on Disaster Medical Care be changed to "Committee on Emergency Medical Care."

AMA Annual Meeting . . . In view of the proximity of the 1967 AMA Annual Meeting (Atlantic City), the Board authorized the attendance of three alternate delegates from MSNJ.

Conference of County Society Presidents . . . Accepted the report of the chairman of the County Society Presidents' Conference, covering such items as (1) the role of the county and state societies in aiding members having disputes with administrators of the federal Medicare Program; (2) "Medicad" — Title 19; (3) absorption of osteopaths into MSNJ; (4) consideration of changes in abortion laws; (5) hospital-doctor relationships: and (6) licensure for M.D.'s who have declared intention of becoming citizens. The group suggested that future meetings of County Presidents not be held on major religious holidays and that presidents-elect be invited.

Malpractice Claims . . . Accepted the following report of the Administrative Office of the Courts, supplied at the request of this Board:

Summary of Proceedings as of February 28, 1967

Requests for subpanels		48
Awaiting consent of doctors	21	
Awaiting hearing by subpanels	2	
Claims heard by subpanels	17	
Reasonable basis*	6	
No reasonable basis*	12	
Consents refused by doctors	7	
Withdrawal of request for panel	2	

Committee to Meet With State Board of Medical Examiners . . . Referred action on recommendations of this Special Committee, on the matter of the licensure of foreign physicians until report by legal counsel at the April meeting of the Board. A-607 is an amendment to the Medical Practice Act which would permit a candidate to qualify for licensure upon declaration of his intention to become a citizen. There is some question as to whether this contains language to provide that the license would be surrendered at the end of six years if citizenship had not been attained, or whether an amendment to A-607, already suggested to the Attorney General, is necessary.

. . . Directed that the matter of suspension or revocation of the license of a physician who has been authoritatively deemed "incompetent to practice" be re-referred to the Board of Medical Examiners, with the request that suitable legislation be prepared to empower that Board to carry out such action.

The AMA Physicians' Placement Service

When the approaching end of the war loomed in 1944, physicians on the home front foresaw the need for an organized program to help their military counter-parts return to civilian practice. Accordingly, the AMA in 1944 established a Bureau of Information to "assist returning medical officers in their educational, licensure, and placement problems." This was envisioned only as a temporary project, and it was abolished in November 1947, because its purpose (relocation of medical officers) had by then been largely accomplished. Its work was transferred to the Council on Medical Service until the "tapering off" process of service requests was completed. But the requests never stopped. The war, directly or indirectly, had spurred profound changes. The wartime interruption of their practices gave medical officers an opportunity to think out their futures. It opened their eyes to new challenges. It stimulated several thousand doctors to continue their medical education or to enter specialty training.

Population patterns were then changing. Some physicians took this as their cue to search for more attractive locations. The uninterrupted period of post-war prosperity has

* In one case, the plaintiff made two allegations of negligence. The panel found no reasonable basis on one count, but did feel that there was a reasonable basis on the other. This is why the figures 6 and 12 total 18 rather than 17. The "no reasonable basis" line includes one with three physicians as defendants, and here one doctor refused to consent to the panel proceedings.

served to multiply this mobility. Thus, the "temporary" expedient by the Bureau of Information mushroomed into a major AMA service to physicians, those seeking physicians, and to the nation at large.

Established as the successor unit to the Bureau in 1948, the AMA Physicians' Placement Service has processed applications from 26,140 physicians seeking to be "placed" and registered 31,760 openings during its 18 years of existence. The service is provided without any charge or obligation. The PPS had 3,196 openings registered and 2,750 physician registrants in 1966. Back in 1948 it had 209 openings and 622 registrants.

The AMA Physicians' Placement Service works closely with all state medical societies, most of whom have ongoing placement programs. It exchanges information on registrant applications and practice opportunities. It brings together physicians and opportunities in different states or geographic areas.

In a way, the AMA Physicians' Placement Service is not a "placement" service at all. Its job is to supply information to applicants and those listing openings in an attempt to match their respective needs — to help find the "right" physician for the "right" location or position. Once brought together, two interested parties then seek to work out reciprocally satisfactory arrangements. The PPS does not know how many physicians it has helped to "place." These data are often not available since a good many registrants don't report their final status.

A "bonus" effect of the service is that registrants pass along the word about openings to other physicians who might be interested in a particular opportunity. Placements frequently result from these word-of-mouth contacts. Even more frequently, registrants are led to other opportunities they find more attractive as the result of PPS-originated contacts.

About 70 per cent of the registrants are looking for their first positions. But, today, PPS is emphasizing finding places to practice — full- or part-time — for physicians who have not recently been engaged in active practice. This includes older physicians who had been retired, women physicians who temporarily had abandoned medical practice, and physicians who had been engaged in other areas of work.

In addition to the placement service, PPS also helps the practicing physician by providing carefully researched information as a guide in planning physicians' medical facilities and managing medical practice. It also provides communities with information about the Community Medical Assistance Program for rural communities, a plan carried out cooperatively by the AMA and Sears-Roebuck Foundation.

If you ever consider relocating or entering a different type of practice; are looking for a prospective partner, associate, or an additional physician for your community; or are thinking about building new office facilities or modernizing present ones, you'll certainly find it advantageous to see what the AMA Physicians' Placement Service has to offer. And if you hear of someone who is "looking," you may do him a big favor by referring him to PPS.

The Terms "Ethical" And "Unethical"

Historically, the term "ethical" has been used in *Opinions and Reports* of the Judicial Council and in resolutions adopted by the House of Delegates to refer to matters involving (1) moral principles or practices; (2) customs and usages of the medical profession; and (3) matters of policy not necessarily involving issues of morality in the practice of medicine. The word *unethical* has been used to refer to conduct which fails to conform to these professional standards, customs and usages, or policies, as interpreted by the American Medical Association.

Unethical conduct involving *moral principles,* values, and duties calls for disciplinary action such as censure, suspension, or expulsion from medical society membership.

Failure to conform to the *customs and usages* of the medical profession may call for disciplinary action depending upon the particular circumstances involved, local attitudes, and how the conduct in question may reflect upon the dignity of, and respect for, the medical profession.

In matters strictly of a policy nature, a physician who disagrees with the position of the American Medical Association is entitled to freedom and protection in his point of view.

— Report of AMA Judicial Council (Nov. 26, 1966) as approved by the AMA House of Delegates.

AMA Posture On Chiropractic

The American Medical Association has adopted an official policy on chiropractic. This statement, initiated by the Committee on Quackery, was adopted unanimously by the House of Delegates in November, 1966.

The official policy of organized medicine on chiropractic reads: "It is the position of the medical profession that chiropractic is an unscientific cult whose practitioners lack the necessary training and background to diagnose and treat human disease. Chiropractic constitutes a hazard to rational health care in the United States because of the substandard and unscientific education of its practitioners and their rigid adherence to an irrational, unscientific approach to disease causation

"In 1965, a United States District Court, in upholding a state's constitutional right to refuse to license chiropractors, said that 'since chiropractic claims to be a complete and independent healing art capable of curing almost all kinds of disease, the state legislature may have felt that the requirement of a foundation in materia medica and surgery . . . would be a protection to the public.' Without dissent, the United States Supreme Court affirmed the decision.

"The wisdom of these decisions by the nation's highest courts justifies the medical profession's educational program of alerting the nation to the public health threat posed by the cult of chiropractic."

Medical Stockpiles For Disaster Use

In any large-scale disaster, hospitals have to have ready for swift use, an inventory of drugs, supplies, vaccines, and the like. The problem is how to store these items, make sure that they are always fresh, and have them readily available.

As a first step, the United States Public Health Service will place in the nation's hospitals, a 30-day supply of critical medical items for disaster care. These supplies, known officially as the Hospital Reserve Disaster Inventory (HRDI), assure maximum flexibility in making a health resource available at points of greatest need as quickly as possible. This arrangement will also provide a rotation system for supplies that might deteriorate in storage. The hospital will utilize these emergency supplies in its daily operations and will continue to purchase such supplies on its regular schedule, thus maintaining its normal inventory and the emergency inventory at the same time. By rotating these supplies, the hospital will be assured that it can operate for 30 days without resupply during an emergency, if supply lines are disrupted.

A contract will be negotiated between the Public Health Service and the hospital participating in the HRDI Program. The State Departments of Health and of Institutions will be kept fully informed of all hospitals which agree to participate in the HRDI Program. The Packaged Disaster Hospital (PDH) Program is being redirected close to com-

munity hospitals. Major changes in the program are:

(1) Packaged Disaster Hospitals, on a selective basis and based upon location criteria established by the Public Health Service, will become affiliated with community hospitals. Community hospitals agreeing to affiliate with a PDH will be requested to (a) rotate pharmaceuticals contained in a refurbished PDH with their regular stocks; (b) provide professional staff for utilization of the PDH in time of a disaster; and (c) formally accept responsibility for the maintenance of the pharmaceuticals and for the staffing procedures.

(2) Eventually every PDH will be refurbished and brought up to the new standard which is valued at over $40,000.

The Packaged Disaster Hospital will remain under the control of the State as a resource for the State and its sub-divisions. The State will continue providing proper storage, maintenance of adequate surveillance of the PDH, and all of the services it has been providing since the pre-positioning program was implemented. The eventual goal of the Public Health Service is to have every PDH in the State affiliated with a Community Hospital.

What Is The Academy Of Medicine Of New Jersey?

It is an institute for learning, study, and research. It provides a place where doctors may gather, meet their fellows and exchange ideas. The Academy is a symbol to the community of the quality of the New Jersey medical profession. It is an agency for the diffusing of knowledge among the professions related to medicine. And it is a public civic institution where intelligent citizens may seek scientific information.

Founded in 1911 by a group of scientifically-minded physicians, the Academy of Medicine of New Jersey is devoted to "the advancement of the science and art of medicine, the maintenance of a medical library, the promotion of public health, and medical education." The first meeting was held on February 25, 1911, at the Newark public library, and was attended by 100 distinguished men of medicine. For 55 years, the members of the Academy (now numbering 1300) have held fast to the ideals of the founders. It is still a voluntary association, concerned with learning, study, and research.

From a modest beginning, holding a few meetings a year for the members, the Academy has grown to an educational institution holding close to 100 meetings a year. Its library has grown from a small corner of the Newark Public Library to an imposing collection of 45,000 serving the entire state.

The physician or dentist who joins the Academy is identifying himself with a dedicated and distinguished group which raises the community prestige of his profession. He is helping to support and enhance an institution devoted to the educational welfare of his profession. By his active participation, he is not only growing intellectually, but is materially assisting others to grow with him. The Academy, open to any ethical medical or dental practitioner without regard to race, color, specialty, hospital status or professional eminence, is the surest available preventive of intellectual obsolescence.

The scientific work of the Academy is organized around 20 sections as follows: Anesthesiology; Basic Medical Sciences; Clinico-Pathology; Dentistry; Dermatology; Experimental Medicine and Surgery; Eye, Ear, Nose, and Throat; General Practice; Historical and Cultural Medicine; Internal Medicine; Obstetrics and Gynecology; Occupational Medicine and Hygiene; Orthopedics; Pediatrics; Postgraduate Education; Psychiatry and Neurology; Radiology; General Surgery; Thoracic and Cardiovascular Surgery; and Urology.

The Old "Doctor Book"

The April 3 (1967) JAMA includes a story of the old self-help "doctor book" by Lester King, M.D. "When these do-it-yourself volumes are examined, the reader must keep in mind the profound differences in cultural, economic, and social levels in various parts of the country at that time," Dr. King said. The home medical advisers reflect social as well as medical history.

One of the better books is *The Family Physician,* published in 1802, a high-grade medical discussion designed for the well-educated layman. "In the 18th century, many laymen read widely in the standard medical texts, and might be quite familiar with medical terms, medical theory, and even medical practice," he said. The discussion "is extraordinarily enlightened, the advice sound," Dr. King said. "The doctrines, clearly expressed, accord well with the best medical teachings of the period."

A second book is *The House Surgeon and Physician,* published anonymously in Hartford, Connecticut, in 1818. It was "designed to assist heads of families, travelers, and sea-faring people," and was written by an author who identified himself only as "a physician and surgeon."

Another book was *The Mariner's Medical Guide,* published in Boston in 1884. The author was a "ship druggist," one who compounded and dispensed medicine for the use of vessels. He frankly stated, "My object in publishing this little work, is to furnish the requisite knowledge for the proper use of these medicines." His object in publishing was frankly commercial, and yet, the book itself "shows no self-seeking or commercial taint," Dr. King said.

The medical adviser books present an opportunity to study the sociology of medicine, Dr. King pointed out. They reflect what the public, and to some extent, the medical community, thought important in the classification, description, and cure of disease.

Air Pollution's Effects On Runners

The motor-fuel oxidant type of air pollution in the Los Angeles area may hamper athletic performance, suggests a report in the Journal of the American Medical Association, for March 20, 1967. High school cross-country runners in a Los Angeles suburb, performed poorest at track meets when oxidant air pollution was greatest during the six-year period ending in January 1965.

The Los Angeles area's oxidizing type of air pollution is caused by photochemical reactions with motor fuel. It isn't known whether this type of smog had a direct physiologic effect on the runners, or whether it simply decreased their motivation by causing chest discomfort, a frequent complaint in smog areas. The study started with records of runners' performance. Long-distance runners ordinarily would perform better as the season progresses. According to records, however, many runners failed to improve their racing times.

When the dates of these meets were compared with records of the Los Angeles County Air Pollution Control District, it was found that poorest running performance coincided with periods of greatest oxidizing air pollution near the high school track. Other factors, such as temperature, relative humidity, wind velocity, and wind direction showed no correlation to runners' performance. Correlations were less striking or absent with other measures of air pollution, such as concentrations of air-suspended particles, carbon monoxide, or oxides of nitrogen.

Because the runners were at sea level, where oxygen is plentiful, it seems unlikely that performance was decreased by oxygen lack. The report said, "Oxidizing pollution is definitely irritating to the eyes, and athletes often complain of chest discomfort after exercising in the Los Angeles area on days with high pollution." Slower running thus may be due to discomfort, rather than to the direct physiologic effects of air pollution, the report said.

ANNOUNCEMENTS

Ocular Cyrosurgery

On Saturday, June 10, 1967, the Wills Eye Hospital in Philadelphia will conduct an all-day seminar on cryosurgery. The program includes participation in operations on animals' eyes. The fee is $50, which includes luncheon and dinner. For more details write to the Director of Medical Education, Wills Eye Hospital, 1601 Spring Garden Street, Philadelphia, Pennsylvania 19130.

Cancer Conference in Denver

Physicians interested in cancer control are now able to combine a Rocky Mountain vacation with attendance at the cancer conference to be held at the Brown Palace-West Hotel in Denver, July 14 and 15. A faculty of nationally prominent specialists will present papers and demonstrations. For more details write to the Rocky Mountain Cancer Conference, 1809 East 18th Avenue, Denver, Colorado 80218.

Grants for Study of Geriatrics

The American Geriatrics Society has three $1,800 grants available for residents, to encourage young physicians to devote more time to the study of medical problems of the aged. Sponsored by the Lederle Laboratories, the grants will be administered by the American Geriatrics Society. Applications should be addressed to the Fellowship Committee, American Geriatrics Society, 10 Columbus Circle, New York, New York 10019.

Pfizer Medical Scholarships

Every medical school in the United States now has available a $1,000 scholarship to be administered solely by a faculty committee. Although the scholarships are financed by the Pfizer Laboratories, the sponsor has no control over the selection of the beneficiaries. Medical schools are free to determine the extent to which financial need or school record should be the criterion for the award.

Committee on Occupational Toxicology

Robert E. Eckardt, M.D. of Linden, New Jersey, has been reappointed to the AMA Committee on Occupational Toxicology. This committee provides expert guidance in problems of toxic hazards of the numerous new chemicals continuously being produced by technologic research and development and to which people are exposed occupationally. The Committee is now developing a registry of information on adverse reactions in occupational exposures. Physicians whose primary or supplementary specialty is occupational medicine will be asked to participate in a pilot study using a special form for reporting adverse reactions in occupational exposures to chemical, physical, or biologic agents. Data collated from this registry will be made available to those readers of this JOURNAL professionally concerned with occupational health.

Sex Education to be Auxiliary Feature

Mary Calderone, M.D., proponent of sex education, will be one of the speakers at the 44th Annual Convention of the Woman's Auxiliary to the AMA, June 18 to 22, in Atlantic City. Auxiliary headquarters will be the Shelburne Hotel. Dr. Calderone's talk, "Sex Education: Goals and Means," is scheduled for Tuesday morning, June 20, according to Mrs. Asher Yaguda of Newark, the Auxiliary's national president.

Also speaking on Tuesday will be Charles L. Hudson, M.D., AMA president. Dr. Hudson's talk will be made at the luncheon honor-

ing Auxiliary past presidents and AMA officers and trustees. The Auxiliary's contribution to AMA-ERF will be presented at that time, as well as awards to county and state AMA-ERF winners.

Mrs. Yaguda and Mrs. Karl F. Ritter, Lima, Ohio, president-elect, will be honored at a reception Sunday, June 18. Mrs. Ritter will be installed as president Wednesday, June 21.

Other convention highlights will be "The Little Workshop," a question-and-answer session on Auxiliary programs, and reports on community service, international health activities, health careers, legislation, mental and rural health and safety-disaster preparedness projects. State auxiliary presidents will discuss outstanding local programs at the Monday and Tuesday sessions.

The Auxiliary will also sponsor a teen-age program for children of physicians and guests attending the AMA convention, held concurrently with the Auxiliary meeting. A Sunday afternoon mixer and pool party are among the events planned.

Children Who Smoke

The earlier you start smoking the more serious may be the damage to your health and the more difficult it is to break the habit.

This is the warning note sounded by two new publications of the Children's Bureau, Welfare Administration, Department of Health, Education, and Welfare, directed to the youngest groups of smokers, the 10-13 year olds. "Why Nick the Cigarette is Nobody's Friend," written specifically for fourth and fifth graders, and "A Light on the Subject of Smoking," aimed at the sixth and seventh graders, both emphasize the health hazards of smoking.

While not many young people of these age groups are smoking, according to Mrs. Katherine B. Oettinger, Chief of the Children's Bureau, more and more are taking up smoking earlier and earlier. "It is estimated that some 4,500 youths between the ages of 12 and 17 start smoking each day," she said. "We believe that if these young people get facts about health and the dangers of cigarette smoking fewer of them will start to smoke," Mrs. Oettinger points out in the foreword to each of the new publications.

The booklets are a continuation of the program to warn young persons of the inherent health risks in smoking, a program which resulted from the National Conference on Smoking and Youth held in Washington more than two years ago under Children's Bureau sponsorship. Written in the style and language best understood by the respective age group, the publications, in addition to emphasizing the health hazards of smoking, point out that it is a "dirty" habit, staining teeth and fingers and causing bad breath and that it wastes the youngster's spending money. For the sports-minded boy or girl, the publications draw on statements by star athletes and coaches, telling them that smoking is forbidden for school sports teams — "it hurts both the individual's abilities and the team's chances."

"Why Nick the Cigarette is Nobody's Friend" and "A Light on the Subject of Smoking" may be purchased from the Superintendent of Documents, U. S. Government Printing Office, Washington, D.C. 20402, at 10 cents and 15 cents a copy, respectively.

Manual for Nurses

The American Rehabilitation Foundation has just released a 51-page monograph entitled, *Ambulation: A Manual for Nurses.* It describes detailed processes for each phase of ambulation training of patients. It discusses body mechanics, posture, gait, and crutch and cane walking in a readable manner. The publication of the manual was supported in part by grants from the United States Public Health Service. Copies are available for 50¢ each from the American Rehabilitation Foundation, 1800 Chicago Avenue, Minneapolis, Minnesota 55404.

OBITUARIES

Dr. Francis J. Fadden, Jr.

At the untimely age of 64, death came on March 30, 1967 to Dr. Francis J. Fadden, one of Bergen County's leading orthopedic surgeons. Born in Virginia in 1903, Dr. Fadden obtained his M.D. at Georgetown in 1928. His early interest was in pathology, especially bone pathology, and after graduate training in orthopedics at New York's Hospital for Special Surgery, he entered the private practice of orthopedics in Englewood. He was an attending orthopedist at the Englewood Hospital, and was the senior surgeon at the Children's Hospital in Westfield. He was also active in the affairs of our Bergen County Medical Society.

Dr. William C. Griffey

Death came suddenly on March 5, 1967 to William C. Griffey, M.D., a prominent South Jersey pediatrician. Born in 1905, he received his M.D. at Hahnemann in 1929. He served as a medical officer in the Army of the United States during World War II, rising to the grade of major. For many years, Dr. Griffey was school physician for Haddon Township. He also had several tours of duty on the board of managers of the County Hospital for Chest Diseases in Blackwood. Dr. Griffey was identified with both Our Lady of Lourdes Hospital and the West Jersey Hospital in Camden.

Dr. Charles W. Naulty, Jr.

One of our State Society's senior members — and a general practitioner of the "old school" — Dr. Charles W. Naulty, Junior, died on March 27, 1967 at the age of 84. After earning his M.D. at the University of Pennsylvania in 1905, and after interning in his native city of Philadelphia, he came to the mouth of the Raritan River in 1907. And he liked it so much, he remained there for 60 years—serving the people of Middlesex County for more than half a century. He had a busy tour of duty as president of the Middlesex County Medical Society. Dr. Naulty was an active participant in civic affairs in the Raritan Valley area. He was on the Perth Amboy Board of Education; he was chief surgeon to the local Red Cross Chapter; he was president of the medical staff of the Perth Amboy Hospital; he was cited by the Boy Scouts of America as an active and effective leader there; he was in charge of the United States Quarantine Stations at Perth Amboy; and the list could go on . . . and on.

Dr. L. Samuel Sica

On March 21, 1967 this Society lost one of its most active and prominent members. Dr. L. Samuel Sica was born in Italy in 1885, but was reared in Vineland, in southern New Jersey. A 1909 graduate of the Jefferson Medical College, he came to the Trenton area shortly thereafter. Dr. Sica was a surgeon and eventually became chief of surgery at the Saint Francis Hospital in Trenton, and for many years was president of the medical staff of that hospital. He was medical director of the State Prison.

Dr. Sica was feted by his colleagues in 1965 as the "Man of the Year," and was laureate of the Golden Merit Award of this Society in 1959. He was a founder of the American Board of Surgery and one of its early diplomates, as well as a Fellow of the American College of Surgeons. He was active on the Trenton Board of Education, and served several years as its president. He also had a tour of duty as president of the Mercer County Medical Society.

Dr. Sica served this Society as a member of the Board of Trustees for many years, including a term as Chairman. He remained active in his professional and Medical Society affairs, in spite of continuing ill health, almost until the day of his death. He was one of the pioneers in the development of a public relations program for The Medical Society of New Jersey, shortly after the end of World War II.

MEETINGS OF MEDICAL INTEREST

This listing has been compiled by the Academy of Medicine of New Jersey. For additional information, including exact time of meetings, write to the society or hospital listed.

1967

May

10 **Ocean County Medical Society**

10 **Hackensack Hospital**
"Recent Advances in Diabetes"

10 **Mercer County Medical Society**
"History of Cardiac Surgery"

The Academy of Medicine of New Jersey
St. Joseph's Hospital, Paterson
"Intensive Care of the Cardiac"

11 **Burlington County Medical Society**
Annual Ladies' Night

11 **Essex County Medical Society**

11 **New Jersey College of Medicine and Dentistry**
Postgraduate Course in Psychiatry

11 **St. Mary's Hospital and Hahnemann Medical College Faculty**
St. Mary's Hospital, Passaic
"Respiratory Disease"

13-17 **Annual Meeting of The Medical Society of New Jersey**
Chalfonte-Haddon Hall, Atlantic City

16 **The Academy of Medicine of New Jersey**
Haddon Hall, Atlantic City
"Accidental Poisoning"

16 **Hackensack Hospital Association**
Hackensack
"Recent Advances in Diabetes"

17 **New Jersey State Department of Health**
Workshop on State Health Aid

18 **Somerset County Medical Society**

18 **The Academy of Medicine of New Jersey**
Somerset Hospital, Somerville
"Recent Advances in G. I. Malignancy"

18 **New Jersey College of Medicine and Dentistry**
Postgraduate Course in Psychiatry

19 **Industrial Medical Association**
General Motors Plant
Linden

23 **Passaic County Medical Society**

24 **Princeton Hospital**
"Intensive Care of the Cardiac"

25 **New Jersey College of Medicine and Dentistry**
Postgraduate Course in Psychiatry

30 **Cape May County Medical Society**

June

1 **New Jersey College of Medicine and Dentistry**
Postgraduate Course in Psychiatry

8 **St. Mary's Hospital and Hahnemann Medical College Faculty**
St. Mary's Hospital, Passaic
"Alcoholism from a Psychiatric Standpoint"

8 **Burlington County Medical Society**
Business Meeting

8 **New Jersey College of Medicine and Dentistry**
Postgraduate Course in Psychiatry

New Jersey Public Health Association; American Cancer Society, New Jersey Division; Rutgers, The State University; The Medical Society of New Jersey
Rutgers, The State University, New Brunswick
"Are We Winning The War Against Cancer?"

13 **Bergen County Medical Society**

13 **Cumberland County Medical Society**

14 **Ocean County Medical Society**

June

The Academy of Medicine of New Jersey
Memorial Hospital, New York
"The Practical Aspects of The Management of Breast Cancer"

15 Morris County Medical Society

15 New Jersey College of Medicine and Dentistry
Postgraduate Course in Psychiatry

15 Somerset Hospital Postgraduate Medical Education
"Metabolic Bone Disease"

17 American Diabetes Association
Atlantic City

18-22 American Medical Association
Atlantic City

20 Warren County Medical Society

21 Middlesex County Medical Society

22 New Jersey College of Medicine and Dentistry
Postgraduate Course in Psychiatry

28 Monmouth County Medical Society

September

12 Bergen County Medical Society

14 Burlington County Medical Society
Scientific/Business

19 Passaic County Medical Society

21 Somerset County Medical Society

26 Cape May County Medical Society

27 Monmouth County Medical Society

October

3 Hudson County Medical Society

10 Bergen County Medical Society

10 Cumberland County Medical Society

11 Ocean County Medical Society

12 Burlington County Medical Society
Scientific/Business

17 Warren County Medical Society

18 Middlesex County Medical Society

18 Passaic County Medical Society

19 Morris County Medical Society

24 The Academy of Medicine of New Jersey and Rutgers Medical School
Rutgers, The State University, New Brunswick
Immunology Workshop

November

7 Hudson County Medical Society

8 Ocean County Medical Society

8 The Academy of Medicine of New Jersey and Rutgers, The State University
The Rutgers Law School, Newark
"A Colloquium on Abortion"

9 Burlington County Medical Society
Scientific/Business

15 New Jersey State Dental Society
Semi-Annual Session

15 Middlesex County Medical Society

15 The Academy of Medicine of New Jersey
Newark City Hospital
Workshop on Cytogenetics

17 Morris County Medical Society

21 Passaic County Medical Society

22 Monmouth County Medical Society

28 Cape May County Medical Society

December

5 Hudson County Medical Society

12 Bergen County Medical Society

12 Cumberland County Medical Society

13 Ocean County Medical Society

14 Burlington County Medical Society
Scientific/Business

20 Middlesex County Medical Society

1968
March

13 The Academy of Medicine of New Jersey
Mountainside Hospital, Montclair
Symposium on Supraventricular Arrhythmias

LETTERS TO THE JOURNAL

Methyl Prednisolone In Sciatica

Dear Dr. Davidson:

In reviewing the scanty literature on intradural therapy for sciatica with methyl prednisolone acetate (Depo-Medrol®), there had been no mention of the *number* of intradural injections that would be required to effect relief.* Dr. Garner, who had initiated this therapy, gave up to 80 milligrams of methyl prednisolone at each injection. In a letter to me, he mentioned that an injection as high as 200 milligrams had been given intradurally. With this dosage, a slight meningismus had occurred that subsequently receded. Thus, there was no definite dosage to use on me but to start with 40 milligrams.

When the sciatica recurred very severely, rather than to carry on with any amount of discomfort (and also to try to eliminate the Taylor-Knight brace), I continued with the intradural injections. The dosage was increased to 80 milligrams. Two injections were given at four week intervals. With this increased dosage, again an increased beneficial effect was noticed. Throughout the course of therapy, laboratory tests of the spinal fluid, urine, and blood showed no adverse effects. Dr. Gardner has stated that pleocytosis, if it occurs, is most likely due to the trauma from the spinal needle. Three weeks after the second 80 milligram Depo-Medrol® injection was given, a third one was administered. At this time, the anesthesiologist and I decided on an epidural nerve block with procaine by relocating the 22 guage spinal needle from the intradural or subarachnoid space. This technic had not been previously reported. The effect was striking, more so than following the initial therapy. After three days not even an aspirin tablet was required. This was startling to me. A review of a very large number of cases of surgery for sciatica made by a group of neurosurgeons,[1] came to the following conclusion: "We prefer medication, frequent changes in drugs, psychotherapy, and physiatric measures to another unsuccessful surgical procedure. Frank discussion with the patient that he has to live with a degree of pain and discomfort may make for a better viewpoint in *"savoir vivre."*

Many orthopedists want to place multiple pillows under the knee when sleeping. I found that placing one pillow under the lumbar curvature and one under the knee reduced the pain in the lower leg and ankle that normally wakens the individual early in the morning. The Taylor-Knight brace was eliminated and I devised one much more comfortable, combining the principles in the Taylor-Knight and McCausland chair brace.

The total number of required intradural injections of Depo-Medrol® has not been determined in the treatment of sciatica when it is a part of the herniated disc syndrome. As a patient, I received nine injections at intervals of three to four weeks and with no adverse effects. Dosage ranges from 40 to 80 milligrams of Depo-Medrol® were effective. The accepted technic of intradural injection was modified for the first time by doing an *intradural* injection of the methyl prednisolone and relocating the spinal needle to give an epidural injection of procaine (to cause a nerve block) to enhance the effectiveness of the treatment.

Jack R. Karel, M.D.
Hillside

Uncritical Case Report

Dear Sir:

The rather uncritical report of a single case by Jack R. Karel, "A New Treatment for Sciatica," which appeared in the February Journal, is unfortunate because of its enthusiasm and the fact that it has been widely quoted in local newspapers.

1. E. S. Gurdjian *et al.: Neurology*, 18:791 (September 1961)

* JOURNAL, MSNJ, February 1967, pages 82 and 83.

We have been using epidural installation of hydrocortisone for at least five years at Overlook Hospital in Summit and Morristown Memorial Hospital. More recently intradural installations have also been used, usually with questionable help to the patient with chronic sciatic pain.

Doctor Karel's comment — "It is most interesting that the medical profession has not been adequately alerted to this new procedure for the treatment of intractable sciatica . . . its safety has been amply demonstrated . . . why then has it been withheld?" — is not justified. Doctor Karel quotes sixteen references, three by Doctor Gardner which appeared in the Cleveland Clinic Quarterly but he fails to cite a number of other articles written by Doctor Gardner in journals such as Anesthesia and Analgesia, and the many talks Doctor Gardner has given before the neurosurgical and other medical societies. This mode of treatment is neither new, unpublicized, nor without dangers. Intrathecal cortisone is widely used now for multiple sclerosis. We have one patient, who, after such an injection, developed a neurogenic bladder. There are other patients who seem to develop subarachnoid adhesions after these injections as witnessed by later myelograms or direct surgical inspection of the nerve roots within their dural sac.

Doctor Karel was fortunate that none of his intradural injections left him with severe headaches. We have seen these headaches linger as long as three and four weeks. It should also be added that the extradural injection given via the caudal technic with Procaine-hydrochloride and hydrocortisone acetate can be quite painful.

The review of the literature which Doctor Karel presents is limited but good. I object, however, to the Journal publishing without comment such a subjective single case report which emphasizes what would appear to be the magic in this "new treatment." The doctor's personal case shows that the treatment is not lasting. His initial injection was followed by a second one three weeks later. He then took a motor trip which promptly produced swift recurrence of the more severe symptoms of sciatica. This was followed by at least twelve more weeks of treatment, four injections at intervals of three weeks, followed by two epidural injections and even then he had to wear a Knight-Taylor brace.

Doctor Karel fails to tell us the rationale of why the four intradural injections of Methylprednisolone Acetate were switched to two daily successive injections of hydrocortisone sodium succinate in the epidural space.

HENRY R. LISS, M.D.
Morristown

201st ANNUAL MEETING

EXHIBITS

A THREE-WAY TREAT

One of the colorful aspects of any medical convention is the interesting array of exhibits. This year, your Society has provided three classes of exhibits:

INFORMATIONAL

SCIENTIFIC

TECHNICAL

Take the time to inspect each one—not just a look-see . . . but a real indepth study. You will be surprised at the wealth of new information.

May 13-17, 1967

BOOK REVIEWS

Modern Treatment: Treatment of Collagen Diseases, Clarence E. Rupe, M.D., Editor; Treatment of Adrenal Disorders, Donald H. Nelson, M.D., Editor. New York, 1966, Hoeber Medical Division, Harper and Row. Pp. 272 ($16.00 per year, by subscription).

Here is another in a series of bimonthly publications dealing with disorders commonly encountered by the medical practitioner in his office and in the hospital. This issue is devoted to Collagen Diseases and as a second unit, Adrenal Disorders. There are several publications dealing solely with up-to-date methods of treatment, but this series is outstanding in the clear way in which the authors present physiologic and biologic background material.

The individual subjects are discussed by recognized authorities in the field. Particularly recommended is the article on the complications of adrenal steroid therapy. This is a timely and informative review. Listed and discussed are seventeen complications which may be encountered in patients receiving some of the recommended medications. This valuable addition to the series will succinctly and clearly aid the busy practitioner in applying effective treatment to patients with adrenal and Collagen disorders.

EDWIN KELLERMAN, M.D.

Histones: Their Role in the Transfer of Genetic Information. Edited by A. V. S. de Reuck, M. Sc. and J. Knight, B. A. Boston, 1966, Little, Brown and Company. Pp. 115. ($3.50)

This book is a collection of research reports by 23 leading histone scientists, presented at a Ciba Foundation Study Group in England in 1965. The discussion of each report by the participants in the conference is one of the most stimulating aspects of this book. Together with the reports themselves, the comments provide a truly exciting intellectual atmosphere for researchers who seek new ideas.

Histones are basic proteins which contain relatively large proportions of the amino acids, arginine and lysine. These proteins are found in the cell nuclei of higher plants and animals, and are associated with the DNA chromosomes. Most biologists believe that histones play an important part in the regulation of gene activity by complexing with the phosphoric acid groups of DNA along both sides of the double helix. Evidence indicates that the formation of histone-DNA complexes prevent DNA from participating in the synthesis of RNA, thereby inhibiting the formation of RNA.

Some of the general subjects discussed, along with new findings, are: the effect of histones on embryonic development; the fractionation, structure, and specificity of histones; the action of corticosteroids on the enzymic acetylation of histones; the appearance of histones in the course of evolution; and the histone-induced inhibition of RNA synthesis in the nucleus.

H. M. BATES, Ph.D.

Current Practice In Orthopedic Surgery. John P. Adams, Editor, Volume 3. St. Louis, 1966, C. V. Mosby Company. Pp. 276. ($18.75)

In the first section of this book, Dr. Shands gives excellent biographic sketches of William L. Detmold (the "first American orthopedic surgeon") and Louis Bauer (the "pioneer in American orthopedic surgery.") These brief but excellent articles provide interesting material for anyone in this field.

The second section of the book is concerned with the surgery of cerebral palsy. Dr. Paine writes of the symptoms and signs of diagnostic and prognostic significance in cerebral palsy. Although there are no foolproof methods, this article provides a good method of developing a base line for further evaluations. The article by Doctors Bassett and Baker on equinus deformity in cerebral palsy is excellent. Their method of lengthening the gastrocnemius aponeurosis is a superb addition to the armamentarium of the surgeon who deals with cerebral palsy. Dr. Bleck's chapter on hip deformities in cerebral palsy is a valuable review of hip deformities and their management. Well chosen illustrations and x-rays vividly enrich the text. Dr. Goldner's article on the reconstruction of the upper extremity in neurologic disease (along with appropriate photographs and illustrations) provides a practical method of dealing with these problems.

The third section of this book is devoted to general orthopedic surgery. Dr. Blount offers material on osteochondrosis deformans tibiae, which bears his name, Blount's Disease. He is the acknowledged authority on this condition and this chapter is well written, well illustrated, and certainly worth the effort and time spent in reading it. It is also a basic bibliography for those who have not met this condition before. The text concerning digital transposition by Dr. Littler is accompanied by his usual superior illustrations. The reader is cautioned that this procedure is one of great technical difficulty and requires the skill of a trained hand surgeon. Dr. Deyerle describes how to improve the fixation of fractures of the neck of the femur. Deyerle's method, at least in his hands, has produced excellent results. The reader is cautioned to follow the technic precisely, and to equip himself with the appropriate technical implements before this method of hip pinning is attempted. Material on muscle testing by Miss Vaughn (a registered physical therapist) is a solid and basic review of muscle function. This is highly recommended for the beginning orthopedist and especially for all surgical residents.

The final section deals with the emotional aspects of low back pain. Attention to this may allow patients with this type of back problem to be sent for psychiatric treatment long before it is obvious that orthopedic measures will not provide adequate relief.

In summary, the 1966 edition of this annual covers a wide field of orthopedic problems. The authors are well qualified and present subjects of special interest to them. It is not, and it is not meant to be, a review of all orthopedic problems. But this is certainly worthwhile reading for the orthopedic surgeon.

GEORGE ROVERE, M.D.

The Causes, Controls, and Organization of Behavior in the Neonate. Peter H. Wolff. New York, 1967 International Universities Press, Inc. Pp. 105 ($2.50)

The title of this book is misleading. Instead of offering a complete description of neonatal behavior completely, the author describes various experiments by himself together with a discussion. Dr. Wolff presents his data as an "overview" of newborn motor behavior. He then goes on to suggest guide lines for further study.

The first portion of the book presents the experimental observations. This includes spontaneous behavior in sleep, responses to external stimuli, and responses to internal stimuli. The number of infants studied (12) is too small for an exhaustive work. Moreover, this reviewer questions the interpretation of some of the technics used. Thus, response to pain was tested by stroking the naso-labial fold with a wisp of cotton, while sensitivity to touch was tested by gently stroking the umbilicus or the inner thigh with the finger tip. This leaves a lot to be desired in terms of scientific methodology.

The discussion in the second portion of the book is based on the author's experimentation and his unique interpretations. Here he proposes directions in developmental research consistent with the empirical data of early infancy as developed by others. The book is provocative in this respect. No comprehensive psychological theory has incorporated experimental findings in infancy since Piaget's work, and thus it may be of interest to the psychological researcher. However, it has extremely limited use for the clinician.

Seymour F. Kuvin, M.D.

Drunk's Diary. Theodore Van Doran. New York, 1967, Philosophical Library. Pp. 116. ($4.00)

No one can read more than a few pages of Mr. Van Doran's book without being struck by his sincerity and humility. He writes with missionary zeal. His desire to save his fellow alcoholics is intense and genuine. "They are not willfull bums, they are sick people." While one may not agree with his contention that a complete religious conversion is necessary to overcome alcoholism, the author cannot be accused of being maudlin or weak in his approach. Vivid descriptions of the alcoholic both before and after addiction are given. Startling statistics are quoted, such as one out of every five alcoholics is a professional man or a leader in industry, or 65 per cent of all alcoholics are regularly employed.

The pre-alcoholic personality in all its guises and weaknesses is truthfully portrayed. Mr. Van Doran concludes that the personality remains fundamentally unaltered after addiction is interrupted, if no appreciable brain damage has taken place.

Today, he feels there is more hope for the alcoholic. Alcoholics Anonymous has provided the way. The personality *can* be modified and men *can* be taught how to live with their weaknesses. Basically, this book is a testimonial to the success of Alcoholics Anonymous. The author, however, would not have us believe that this technic is entirely new or unique. It is rather a composite of all that has been found true and of value in the past, and Mr. Van Doran recognizes and appreciates all the sources from which it has drawn.

Theodore A. Anderson, M.D.

Current Therapy 1967. Edited by H. F. Conn, M.D. Philadelphia, 1967, Saunders. Pp. 844. ($13.00)

Here is the 19th edition of a book that has obviously won its spurs as a useful volume. It is a practical, yet concise compendium of what particular authorities do in treating various disorders. In all, the book has over 200 contributors. A wide range of viewpoints gives the text depth as well as breadth. An interesting account of what one practitioner carries in *his* little black bag is the opening chapter. Normal laboratory values for blood, urine, and spinal fluid, and tabulation of renal and other functions, are found in the end pages. There is something suggested for practically every disorder known to man, from abruptio placentae to the Zillinger syndrome, and everything in between. This is a book which will soon earn its keep on any doctor's shelf.

Victor Huberman, M.D.

Egg Implantation (Ciba Foundation Study Group No. 23). Edited by G. E. W. Wolstenholme and Maeve O'Connor. Boston, 1966, Little, Brown and Company. Pp. 112. 25 Illustrations ($3.50)

This 100-page symposium is a tribute to 50 years of basic research in the overall endocrinologic, histologic, and biochemical fields stimulated by Courrier's original studies of hormonal control of secondary sex characters. The authors and the editors have provided references to practically all of the current pertinent literature. This in itself is of tremendous value to the reader, whether he be researcher or interested physician.

The text opens with a review of the necessary hormonal stimulation, balance, and continuity of early pregnancy implantation. This will interest any clinician concerned with sterility problems. If these observations carry over in their entirety to the human, they may shed some light on investigations to be made. In a similar vein, a further method of action of the intrauterine devices is postulated. The question is immediately raised, "With the extensive use of oral contraceptives and their production of a pseudopregnancy, do we not have a population who could be studied with advantage?"

The section on inter-relationship (neural and hormonal) between ovary and uterus, should be of support to the conservative surgeon. This research is based on animal studies, but it must be presumed to imply collateral action in the human in spite of the fact that complete human neural mechanisms are not entirely known. The discussion of the facility of the ectopic pregnancy in animals to produce or stimulate gonadotropin is facinating. If only this chapter could be translated to human data, its value would be inestimable.

Trophoblastic penetration of the epithelium has been an impression of erosion and replacement in the writer's mind. This chapter clearly points out the cellular and biochemical changes necessary for such penetration. One would ask, "Is there an electrical potential change in this mechanism which assists the blastocyst to locate in the optimum area?".

Intercommunication in the research sciences is often as important as the research facet itself. This is aptly portrayed in the final general discussion of the day's proceedings. With whom we agree or disagree will be evaluated in factual reporting of our technics and data.

R. V. Chappel, M.D.



Diagnosis:

cystitis?
pyelonephritis?
pyelitis?
urethritis?
prostatitis?

in any case,
usually gram-negative*

Therapy:

two 500 mg. Caplets® q.i.d.
(initial adult dose)

dications: Urinary tract infections caused by gram-negative and some gram-positive organisms.

de effects: Mainly mild, transient gastrointestinal disturbances; in casional instances, drowsiness, fatigue, pruritus, rash, urticaria, mild sinophilia, reversible subjective visual disturbances (overbrightness of hts, change in visual color perception, difficulty in focusing, decrease in sual acuity and double vision), and reversible photosensitivity reactions. arked overdosage, coupled with certain predisposing factors, has produced ief convulsions in a few patients.

ecautions: As with all new drugs, blood and liver function tests are advisle during prolonged treatment. **Pending further experience, like most emotherapeutic agents, this drug should not be given in the first trimester pregnancy. It must be used cautiously in patients with liver disease or vere impairment of kidney function.** Because photosensitivity reactions have curred in a small number of cases, patients should be cautioned to avoid necessary exposure to direct sunlight while receiving NegGram, and if a action occurs, therapy should be discontinued. The dosage recommended adults and children should not arbitrarily be doubled unless under the reful supervision of a physician. Bacterial resistance may develop.

hen testing the urine for glucose in patients receiving NegGram, Clinistix® agent Strips or Tes-Tape® should be used since other reagents give a se-positive reaction.

sage: Adults: Four Gm. daily by mouth (2 Caplets® of 500 mg. four times ily) for one to two weeks. Thereafter, if prolonged treatment is indicated, dosage may be reduced to two Gm. daily. Children may be given proximately 25 *mg. per pound* of body weight per day, administered in ided doses. The dosage recommended above for adults and children ould not arbitrarily be doubled unless under the careful supervision of a ysician. Until further experience is gained, infants under 1 month ould not be treated with the drug.

w supplied: Buff-colored, scored Caplets® of 500 mg. for adults, conveently available in bottles of 56 (sufficient for one full week of therapy) and in ttles of 1000. 250 mg. for children, available in bottles of 56 and 1000.

ferences: (1) Based on 23 clinical papers, 1512 cases. Bibliography on quest. (2) Bush, I. M., Orkin, L. A., and Winter, J. W., in Sylvester, J. C.: timicrobial Agents and Chemotherapy—1964, Ann Arbor, American ciety for Microbiology, 1965, p. 722.

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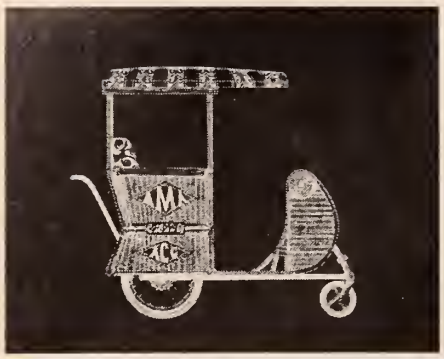
nalidixic acid

a specific anti-gram-negative

eradicates most urinary tract infections...

- Low incidence of untoward effects; no fungal overgrowth, crystalluria, ototoxic or nephrotoxic effects have been observed.
- "Excellent" or "good" response reported *in more than 2 out of 3* patients with either chronic or acute gram-negative infections.[1]

*As many as 9 out of 10 urinary tract infections are now caused by gram-negative organisms: E. coli, Klebsiella, Aerobacter, Proteus, Paracolon or Pseudomonas[2]... However, infections of the urethra and prostate caused by non-gonococcal gram-negative organisms are believed to be less prevalent.



AMA BYLAWS

Chapter VI. Meetings-Section 2. Registration (A) Members. A Member's Section registration shall correspond with his specialty or General Practice status as designated by him for classification in the American Medical Association Directory. To be accepted for Section registration purposes, a member of a Section who desires to change his registration from one Section to another because of a change in his specialty, shall be required to inform the Headquarters of The American Medical Association by written notice of this intention at least sixty days in advance of the Annual Convention.

Chapter VII. Sections-Section 7. Participation in Business Only active members registered in accordance with Chapter VI, Section 2 (A) shall have the right to participate in the business deliberation of a section.

American Medical Association · 116th Annual Convention · Convention Hall ·

June 18-22, 1967 Atlantic City

PLEASE NOTE

An Active physician member may not change his Section registration for voting purposes from one Section to another Section, unless written notice of a change in his specialty has been given the AMA Headquarters at least 60 days (by April 18, 1967) in advance of the opening day of the Annual Convention.

Upon completion of an Active Member's Registration at the AMA Registration Desk, members will not be permitted to switch from one Section registration to another Section registration during the entire period that the AMA Annual Convention is in session.

However, all members are encouraged to attend any and all of the Scientific Section programs. Such attendance has no direct connection with the Section in which an Active Member may wish to be qualified to vote.

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535 North Dearborn Street
Chicago, Illinois 60610

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(Each Physician Must Register in His Own Name)

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Street

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City State Zip Code

I am a Member of the AMA thru the_____State Medical Association or in the following government service

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☐ **GENERAL REGISTRATION ONLY**

Just fill in the coupon at the left. (No Fee)

(This form must be returned before June 1, 1967 to receive your Advance Registration Identification Card for Atlantic City. Your card will be sent to you on June 8 unless you request an earlier mailing date).

☐ **GENERAL REGISTRATION PLUS RESERVATIONS FOR SCIENTIFIC AWARDS DINNER**

Reception and Dinner in honor of the Scientific Award Winners, Wednesday, June 21, 1967; Reception, 6:30 p.m. and Dinner, 7:30 p.m.

Dinner Tickets are $10.00 each, payable in advance.

My remittance of $_____ is enclosed.

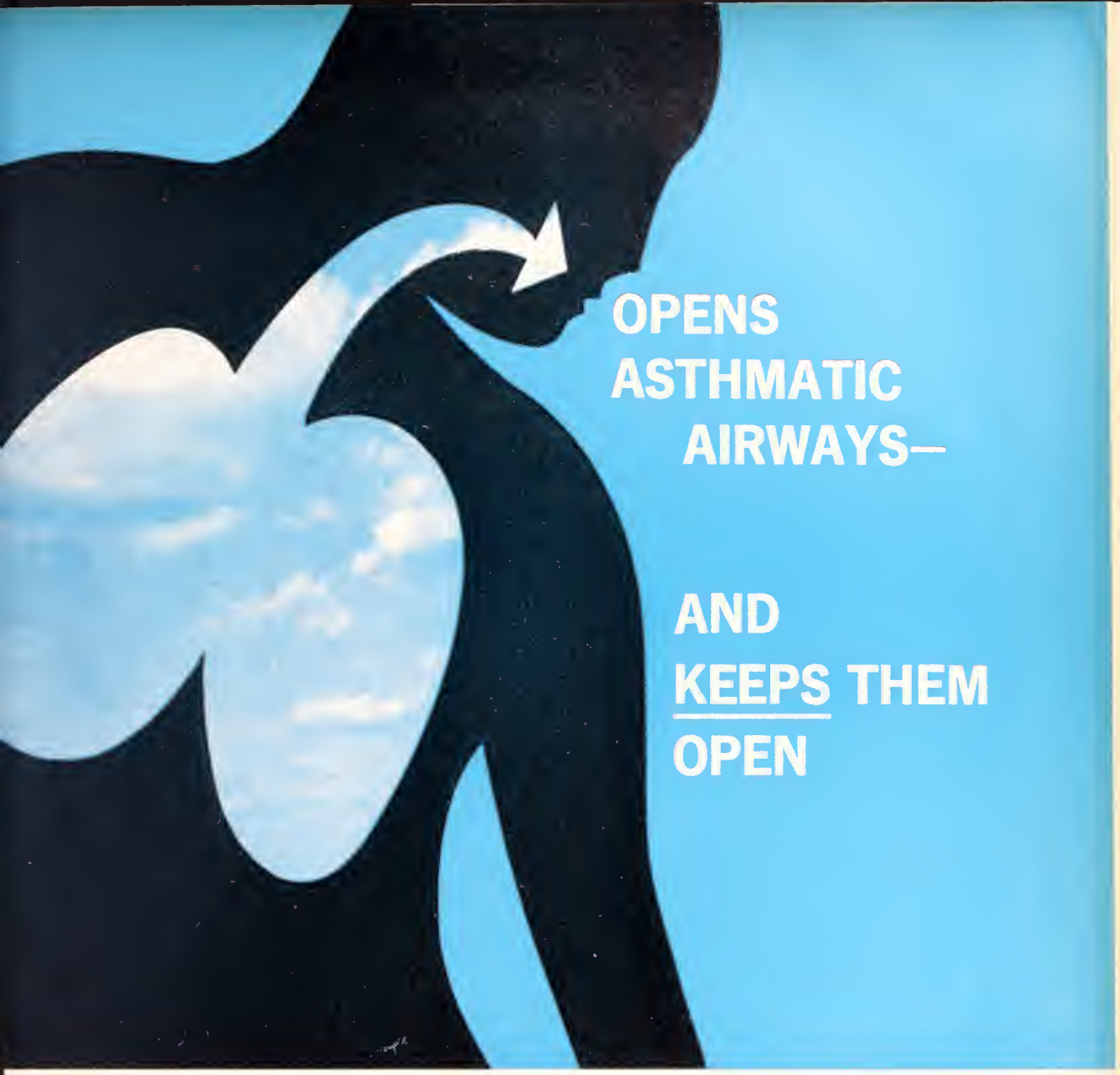
Reservations are limited to approximately 500 people.

Advance Reservations may be made until June 1, 1967. After this date, tickets may be purchased in Atlantic City.

In accordance with the AMA Bylaws, I hold active membership in the AMA and I wish to vote in the Scientific Section I have checked:

- ☐ Allergy
- ☐ Anesthesiology
- ☐ Dermatology
- ☐ Diseases of the Chest
- ☐ Experimental Medicine and Therapeutics
- ☐ Gastroenterology
- ☐ General Practice
- ☐ General Surgery
- ☐ Internal Medicine
- ☐ Laryngology, Otology and Rhinology
- ☐ Military Medicine
- ☐ Nervous and Mental Diseases
- ☐ Obstetrics and Gynecology
- ☐ Ophthalmology
- ☐ Orthopedic Surgery
- ☐ Pathology and Physiology
- ☐ Pediatrics
- ☐ Physical Medicine
- ☐ Preventive Medicine
- ☐ Proctology
- ☐ Radiology
- ☐ Urology

(Only Active Members Will Be Permitted To Vote)



NUMA® DURA-TABS®

for *prolonged* aid to ventilation

Each Numa Dura-Tab provides:

theophylline	225 mg.
ephedrine HCl	50 mg.
butabarbital	25 mg.

(Warning: butabarbital may be habit-forming.)

Numa Dura-Tabs provide *prolonged* three-way action to ease breathing. Theophylline, a potent bronchodilator with minimal effect on the CNS, opens air passages and reduces bronchial spasm. Ephedrine HCl improves breathing capacity through its decongestant action. Butabarbital, a mild sedative, allays fear and apprehension.

Dosage: One Numa Dura-Tab every 8 to 12 hours helps keep the asthmatic patient symptom-free all day/all night.

Precautions: Use with caution in cardiovascular or hyperthyroid disease, severe hypertension, circulatory collapse, prostatic hypertrophy, or glaucoma.

WYNN Pharmaceuticals, Inc. Phila., Pa. 19132 • Manufacturers of QUINAGLUTE® DURA-TABS®

(QUINIDINE GLUCONATE 5 gr.)

This hasn't changed in 25 years.



The Blue Shield Pledge:

"To make available . . . adequate personal and sympathetic medical care, preventive and curative, at the lowest cost compatible with efficient service."

This has . . .

1942: 4,131 MEMBERS
1967: 2,750,000 MEMBERS

A quarter of a century ago, New Jersey Blue Shield was organized by The Medical Society of New Jersey to help the individual and family afford the best medical care available. Today, Blue Shield helps over 2.7 million people in New Jersey — proof that the Blue Shield concept was — and is — a sound one.

BLUE SHIELD • MEDICAL-SURGICAL PLAN OF NEW JERSEY

NEWARK TRENTON CAMDEN MORRISTOWN



"Livingston.. vertigo is my doom!"
Cried Stanley in his doctor's room.





Said the doc, "For your ills
I've got just the pills."



Said Stan,
"Antivert, I presume."

Antivert® tablets syrup stops vertigo
(meclizine HCl, niacin)

Tablets: (meclizine HCl 12.5 mg. and niacin 50 mg.) Syrup: (each 5 cc. teaspoonful contains meclizine HCl 6.25 mg. and niacin 25 mg.)

Most widely prescribed anti-vertigo agent[1] Complete to moderate relief of symptoms in 9 out of 10 patients[2]

Antivert, the leading anti-vertigo product,[1] combines meclizine HCl, an outstanding drug for treatment of vestibular dysfunction, with niacin, a drug of choice for prompt vasodilation. Prescribe Antivert for your patients with vertigo, Meniere's syndrome and allied disorders.

Precautions and contraindications: Frequent, short-lived reactions include: cutaneous flushing, sensations of warmth, tingling and itching, burning of skin, increased gastrointestinal motility, and sebaceous gland activity. In explaining these reactions to the patient, it is suggested that they be regarded as a desirable physiological sign that the niacin is carrying out its intended function of vasodilation. Because of this vasodilation, severe hypotension and hemorrhage are obvious contraindications to Antivert therapy. Although the incidence of drowsiness and other atropine-like side effects such as dry mouth and blurring of vision is low, the physician should alert the patient to the need for due precautions when engaging in activities where alertness is mandatory. **Use in women of childbearing age:** A review of available animal data reveals that meclizine exerts a teratogenic response in the rat. In one study a dose of 50 mg./kg./day (50 times the maximum recommended human dose) produced cleft palate in 2 of 87 fetuses when administered to the rat at critical times during the first 15 days of gestation. At doses of 125 mg./kg./day, meclizine will produce 100% incidence of cleft palate in the rat. At doses of 25 mg./kg./day, decreased calcification of the vertebrae and relative shortening of the limbs were also produced in the rat, but experts disagree as to whether this is a teratogenic response. While available clinical data are inconclusive, scientific experts are of the opinion that this drug may possess a potential for adverse effects on the human fetus. Consequently, consideration should be given to initial use of a nonphenothiazine agent that is not suspected of having a teratogenic potential. In any case, the dosage and duration of treatment should be kept to a minimum. **Dosage:** One tablet or one to two teaspoonfuls (5-10 cc.) t.i.d. just before meals. Specific requirements for individual patients should be determined by the physician. **Supplied:** Tablets in bottles of 100 and 500. Syrup in pint bottles. RX only.

References: 1. Based on 1966 data from independent physicians' market survey organization. 2 Scal, J. C.: Eye Ear Nose & Throat Month. **38**:738 (Sept.) 1959.

Neobon® geriatric + supplement
helps keep them 'on the go'

Each capsule contains:

(1) Vitamins and Minerals	
Vitamin A (acetate)	2000 U.S.P. units
Vitamin D (ergocalciferol, U.S.P.)	200 U.S.P. units
Vitamin B_1 (thiamine mononitrate, U.S.P.)	0.5 mg.
Vitamin B_2 (riboflavin, U.S.P.)	0.5 mg.
Vitamin B_6 (pyridoxine HCl, U.S.P.)	0.5 mg.
Niacinamide, U.S.P.	50 mg.
Calcium pantothenate, U.S.P.	5 mg.
Vitamin E (di-alpha tocopheryl acetate)	5 I.U.
Rutin	5 mg.
Cobalt (from cobalt sulfate)	0.033 mg.
Molybdenum (from sodium molybdate)	0.066 mg.
Copper (from copper sulfate)	0.33 mg.
Manganese (from manganese sulfate)	0.33 mg.
Magnesium (from magnesium sulfate)	2 mg.
Iodine (from potassium iodide)	0.05 mg.
Potassium (from potassium sulfate)	1.66 mg.
Zinc (from zinc sulfate)	0.4 mg.
(2) Hematopoietic Factors	
Iron (from ferrous sulfate)	3.40 mg.
Vitamin B_{12} (cobalamin concentrate, N.F., as Stablets®)	1 mcg.
Vitamin C (ascorbic acid, U.S.P.)	50 mg.
(3) Digestive Enzyme	
Pancreatic substance*	50 mg.
(4) Gonadal Hormones	
Methyltestosterone, N.F.	1.0 mg
Ethinyl Estradiol, U.S.P.	0.006 mg.
(5) Amino Acids	
L-lysine (monohydrochloride)	50 mg.
L-Glutamic acid	30 mg.

*Enzymatically active defatted material obtained from 250 mg. of whole fresh pancreas.

For older adults who require it, daily supplementation with Neobon can help overcome decreases in endogenous gonadal hormone production, as well as deficiencies of iron, vitamins and other nutritional factors. In a single convenient capsule, Neobon provides vitamins, minerals, gonadal hormones, hematopoietic factors, digestive enzymes, and amino acids—all selected for adjunctive therapeutic value in the geriatric syndrome. For example, one of the gonadal hormones in Neobon is ethinyl estradiol. It is more slowly metabolized in the body than natural estrogens or their esters.

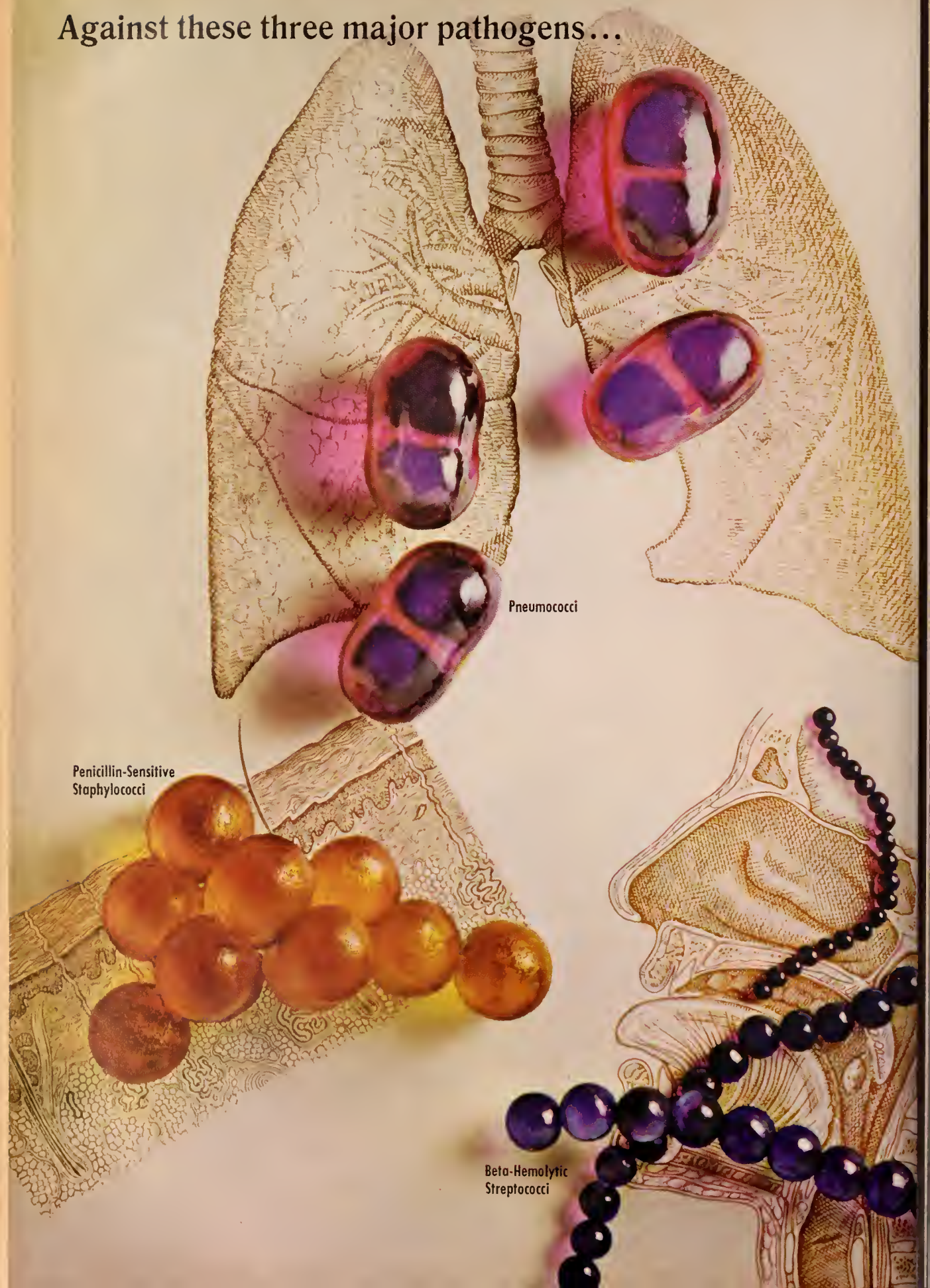
Precautions: Contraindicated in patients in whom estrogen or androgen therapy should not be used, as in carcinoma of the breast or prostate.

Dosage: One capsule, t.i.d. with meals, or as directed by physician.

Supplied: Bottles of 60 capsules. Rx only.

J.B. ROERIG DIVISION
CHAS. PFIZER & CO., INC.
NEW YORK, N.Y. 10017

Against these three major pathogens…



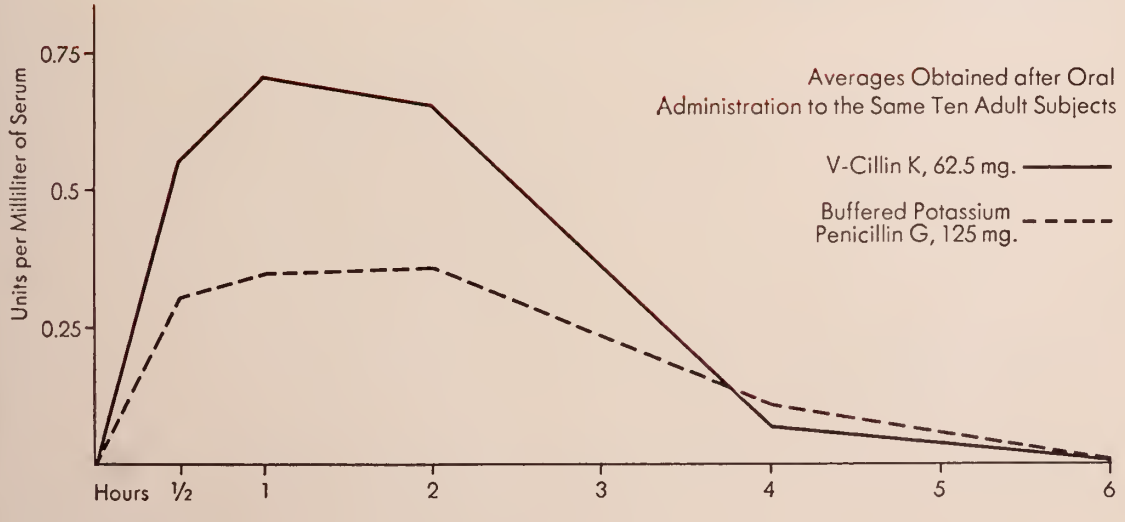
V-Cillin K® provides dependable oral antibacterial activity

because it combines a high degree of in-vitro activity...

Antibiotic	Staph.Aureus (Penicillin-Sensitive) MIC (mcg./ml.) Median	Range	Streptococcus, Group A MIC (mcg./ml.) Median	Range	Diplococcus Pneumoniae MIC (mcg./ml.) Median	Range
Penicillin V	0.02	0.02-0.04	0.02	0.003-0.4	0.01	0.005-0.2
Penicillin G	0.02	0.005-1.6	0.005	0.002-0.2	0.02	0.01-0.1
Methicillin	1.6	0.4-6.3	0.2	0.1-0.4	0.2	0.1-1.6
Oxacillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Cloxacillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

Adapted from Klein, J. O., and Finland, M.: New England J. Med.,269:1019, 1963.

with high blood levels, even in the presence of food



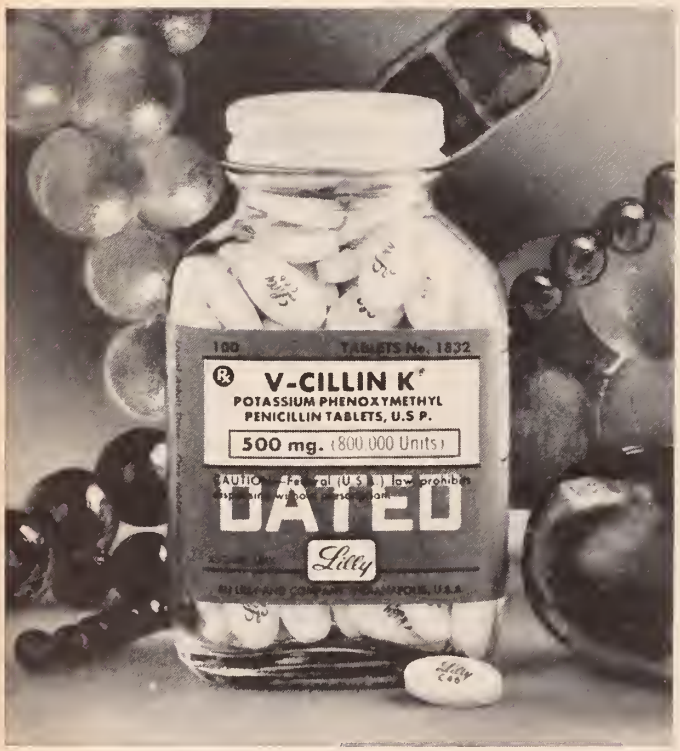
Adapted from Griffith, R. S., and Black, H. R.: Current Ther. Res., 6 253, 1964.

V-Cillin K® Lilly

Potassium Phenoxymethyl Penicillin

(See next page for prescribing information

New 500 mg. tablets...a more convenient way to give high doses



Description: V-Cillin K is the potassium salt of V-Cillin® (phenoxymethyl penicillin, Lilly). This chemically improved form combines acid stability with immediate solubility and rapid absorption. Higher serum levels are obtained more rapidly with this penicillin than with equal oral doses of penicillin G. The higher serum levels and acid stability of V-Cillin K make it a more dependable penicillin for oral use.

V-Cillin K, Pediatric, is an oral solution of clinically proved V-Cillin K in teaspoon dosage form. When mixed as directed, each 5 cc. (approximately one teaspoonful) will contain 125 mg. (200,000 units) phenoxymethyl penicillin as the potassium salt.

Indications: V-Cillin K has been shown to be effective in the treatment of streptococcus, pneumococcus, and gonococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptocaccus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy and tooth extraction in those patients with a history of rheumatic fever or congenital heart disease.

Contraindication: V-Cillin K should not be administered to a patient with a history of penicillin hypersensitivity.

Warnings: In rare instances, the use of penicillin may cause acute anaphylaxis which may prove fatal unless promptly controlled. This type of reaction appears more frequently in patients with a history of sensitivity reactions to penicillin and in those with bronchial asthma or other allergies. Resuscitative drugs should be readily available for emergency administration. These include epinephrine and pressor drugs (as well as oxygen for inhalation) for relief of immediate allergic manifestations and antihistamines and corticosteroids for delay effects.

Precautions: V-Cillin K should be used cautiously, if at all, in a pati with a strongly positive history of allergy.

In prolonged therapy with penicillin, and particularly with hi parenteral dosage schedules, frequent evaluation of the renal a hematopoietic systems is recommended.

In suspected staphylococcus infections, proper laboratory studi (including sensitivity tests) should be performed.

The use of penicillin may be associated with the overgrowth pencillin-insensitive organisms. In such cases, its administration sho be discontinued, and appropriate measures should be taken.

Adverse Reactions: Although serious allergic reactions are much l common with administration of oral penicillin than with intramuscu forms, manifestations of penicillin allergy may occur.

Penicillin is a substance of low toxicity, but it does possess a sign cant index of sensitization. The following hypersensitivity reacti associated with the use of penicillin have been reported: skin rash ranging from maculopapular eruptions to exfoliative dermatitis; u caria; and reactions resembling serum sickness, including chills, fev edema, arthralgia, and prostration. Severe and often fatal anaphyla has occurred (see Warnings). Hemolytic anemia, leukopenia, thro bocytopenia, and nephropathy are rarely observed side-effects a are usually associated with high parenteral dosage.

Administration and Dosage: For Tablets V-Cillin K and for V-Cillin Pediatric, the usual dosage ranges from 125 mg. (200,000 units) thr times a day to 500 mg. (800,000 units) every four hours. For infan the daily dosage may be 50 mg. per Kg. of body weight divided i three doses.

Beta-hemolytic streptococcus infections without associated b teremia may be treated with 200,000 to 400,0000 units three times day. Therapy should be continued for a minimum of ten days to preve development of rheumatic fever and/or other serious complicatio Dosage for routine streptococcus prophylaxis in patients with a hist of rheumatic fever or congenital heart disease may be 200,000 u once or twice daily. When such patients undergo tonsillectamy, to extraction, or other minor surgery, the prophylactic dose should 500,000 units every six hours given two days prior to surgery and two days postoperatively. If oral medication is not feasible on the d of surgery, parenteral therapy should be considered. Mild to mod ately severe pneumococcus pneumonia has been treated effectiv with 250 mg. every six hours.

In staphylococcus infections, 400,000 units or more should be giv every six to eight hours in conjunction with indicated surgical pra dures.

For gonorrhea in males, 500 mg. (800,000 units) every four ho for three doses may be employed; in females, 500 mg. every four ho for six doses are recommended. Patients with a suspected lesion syphilis should have a dark-field examination before receiving penicil and monthly serologic tests for a minimum of three months.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units), bottles of 50 and 100; and 250 mg. (400,0000 units) and 500 m (800,000 units), in bottles of 24 and 100.

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,0000 units) p 5 cc. of solution, in 40, 80, and 150-cc.-size packages. [011867]

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

7006



"George wants to know if it's okay to take his cold medicine now, Doctor, instead of seven o'clock?"

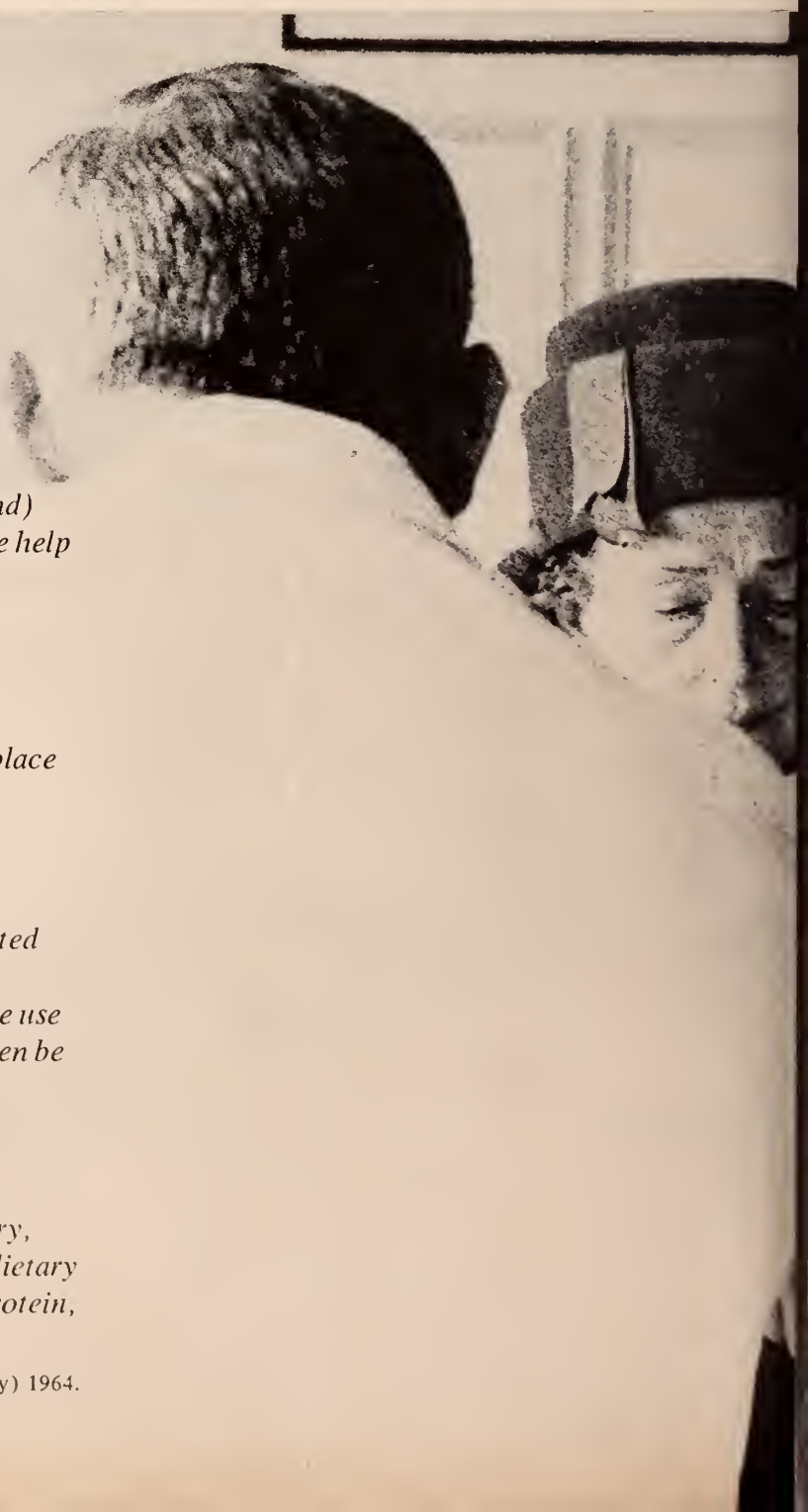
The long-continued action of Novahistine LP should help you both get a good night's sleep. Two tablets in the morning and two in the evening will usually provide round-the-clock relief by helping clear congested air passages for freer breathing. Novahistine LP also helps restore normal mucus secretion and ciliary activity—normal physiologic defenses against infection of the respiratory tract. Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result. Each Novahistine LP tablet contains: phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

NOVAHISTINE® LP

DOW **PITMAN-MOORE** Division of The Dow Chemical Company, Indianapolis

The Mediatric Age:

There is a growing senescent body of people on their way to malignant inactivity, who sorely need your interest and direction to help them back to a more active and useful life. There are medicines too, designed to help. One such has proved useful in clinical practice.



"A steroid-nutritional compound (Mediatric) was used in 100 patients to relieve some of the symptoms caused by degenerative changes of aging . . . This therapy resulted in improvement of 75 per cent of the patients . . ."

McNeill, A. J.: Clin. Med. *8*:518 (Mar.) 1961.

"Mediatric (steroid-nutritional compound) capsules, one a day, seem to give definite help to debilitated patients."

Arnold, E. T., Jr.: Geriatrics *12*:612 (Oct.) 1957.

"Nutritional and hormone bolstering of function in the aged may have a useful place in geriatrics."

Morgan, A. F.: Gerontologist *2*:77 (June) 1962.

"In diets which for any reason are restricted in calories, enough of these substances (B vitamins) may not be supplied . . . The use of B and C vitamin supplements may then be justified and indeed may be necessary."

Morgan, A. F.: Gerontologist *2*:77 (June) 1962.

"Intensive nutritional therapy is necessary, especially in elderly people, to correct dietary deficiencies created by large losses of protein, vitamins and other nutrients."

Riccitelli, M. L.: J. Am. Geriatrics Soc. *12*:489 (May) 1964.

Mediatric®

Designed for the "metabolically spent"

Nutritional reinforcement for those who can't – or won't – eat properly...balanced amounts of estrogen and androgen to counteract declining gonadal hormone secretion and its sequelae of premature degenerative changes...mild antidepressant for a gentle "mood" uplift...

The estrogen component in MEDIATRIC is PREMARIN® (conjugated estrogens—equine), the natural estrogen most widely prescribed for its superior physiologic and metabolic benefits.

MEDIATRIC also provides *nutritional reinforcement—blood-building factors and vitamin supplementation.* It contributes a *gentle "mood" uplift* through methamphetamine HCl.

Three different dosage forms—Liquid, Tablets, and Capsules—offer convenience and variety.

MEDIATRIC Liquid

Each 15 cc. (3 teaspoonfuls) contains:

*Conjugated estrogens—equine (Premarin®)	0.25 mg.
Methyltestosterone	2.5 mg.
Thiamine HCl	5.0 mg.
Cyanocobalamin	1.5 mcg.
Methamphetamine HCl	1.0 mg.

Contains 15% alcohol

MEDIATRIC Tablets and Capsules

Each MEDIATRIC Tablet or Capsule contains:

*Conjugated estrogens—equine (Premarin®)	0.25 mg.
Methyltestosterone	2.5 mg.
Ascorbic acid	100.0 mg.
Cyanocobalamin	2.5 mcg.
Intrinsic factor concentrate	8.0 mg.
Thiamine mononitrate	10.0 mg.
Riboflavin	5.0 mg.
Niacinamide	50.0 mg.
Pyridoxine HCl	3.0 mg.
Calc. pantothenate	20.0 mg.
Ferrous sulfate exsic.	30.0 mg.
Methamphetamine HCl	1.0 mg.

*Orally active, water-soluble conjugated estrogens derived from pregnant mares' urine and standardized in terms of the weight of active, water-soluble estrogen content.

MEDIATRIC helps keep the older patient alert and active; helps relieve general malaise, easy fatigability, vague pains in the bones and joints, loss of appetite, and lack of interest usually associated with declining gonadal hormone secretion.

CONTRAINDICATION: Carcinoma of the prostate, due to methyltestosterone component.

WARNING: Some patients with pernicious anemia may not respond to treatment with the Tablets or Capsules, nor is cessation of response predictable. Periodic examinations and laboratory studies of pernicious anemia patients are essential and recommended.

SIDE EFFECTS: In addition to withdrawal bleeding, breast tenderness or hirsutism may occur.

SUGGESTED DOSAGES: *Male and female:* 3 teaspoonfuls of Liquid, 1 Tablet, or 1 Capsule, daily or as required.

In the female: To avoid continuous stimulation of breast and uterus, cyclic therapy is recommended (3 week regimen with 1 week rest period—Withdrawal bleeding may occur during this 1 week rest period).

In the male: A careful check should be made on the status of the prostate gland when therapy is given for protracted intervals.

SUPPLIED: No. 910 – MEDIATRIC Liquid, in bottles of 16 fluidounces and 1 gallon. No. 752 – MEDIATRIC Tablets, in bottles of 100 and 1,000. No. 252 – MEDIATRIC Capsules, in bottles of 30, 100, and 1,000.



Mediatric®

steroid-nutritional compound

AYERST LABORATORIES, NEW YORK, N.Y. 10017 • Montreal, Canada

6636

Why these 7 patients with moderate to severe anxiety may respond better to Mellaril

1. The agitated patient.
Anxiety—particularly that beyond the range of minor tranquilizers—frequently is expressed as gross motor restlessness, fidgetiness and purposeless movements, and may erupt into aggressive behavior. Mellaril is almost a specific for those patients whose anxiety follows such a pattern.





The psychosomatic patient.
e family physician is rarely given diagnostic luxury of a classic, tbook "anxiety state." Most often must probe for anxiety masked by inctional disorder—or which exacates a somatic problem. Doubleid evaluations have demonstrated t Mellaril can be a significant adct in the treatment of such patients.



The patient under uational stress.
aril helps the patient deal with sses of everyday life. Nonhabitug, it can be given for extended pes of time. It does not "separate" patient from practical problems pressures, does not induce euphoor a fuzziness which can compromise the ability to cope with realities. Rather, it helps the patient move more competently in his daily world by eliminating useless tension, by allowing him to conserve emotional resources and energies, and to direct them against the problems really worth worrying about.



4. The menopausal patient.
The woman who sees change of life as the end of useful life requires support from both family and family physician. Whether the psychological impact of menopause is directly related to hormonal changes, or merely coincidental, is debatable, but estrogenic therapy is frequently inadequate. Mellaril is a useful aid for these patients and, alone, or in combination with reduced estrogen dosage, will help ease the menopausal misery.



5. The previously hospitalized psychiatric patient.
Such a patient may still require the type of medication he has been accustomed to, but because he is no longer in a controlled setting the acceptable level of adverse reactions must be lower. In such circumstances Mellaril is perhaps the drug of choice.



6. The agitated geriatric.
Tranquilizer therapy in the elderly patient always involves special (or at least accentuated) problems: the possibility of drug-induced ataxia, hypotension or depression, for example, assumes an additional significance. These reactions have rarely been observed in geriatric patients treated with Mellaril.



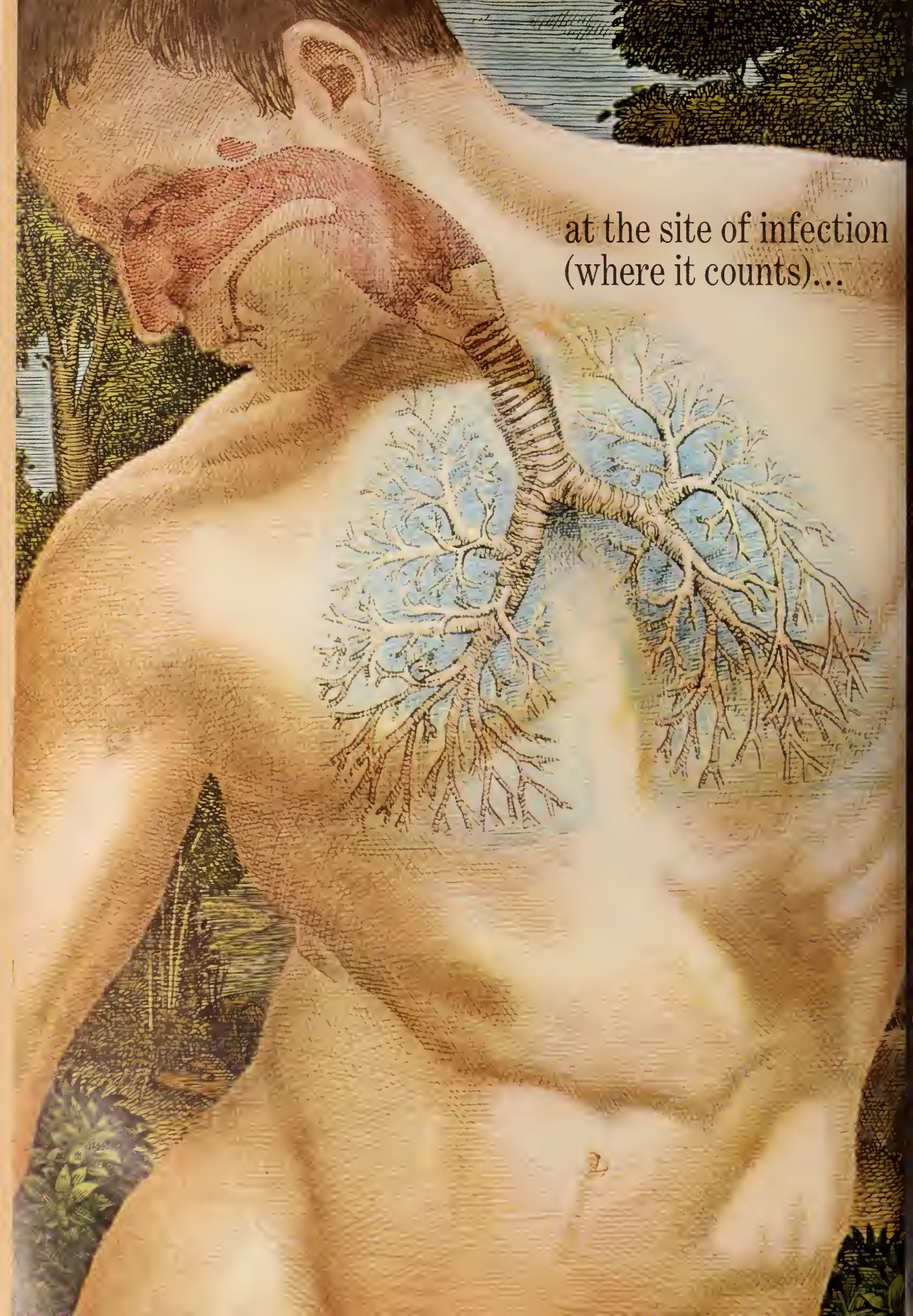
7. The constantly returning patient.
The anxiety patient who has not responded to a minor tranquilizer is not very likely to benefit from your minor tranquilizer of second choice. A major tranquilizer, such as Mellaril, may be indicated in such patients.

Contraindications: Severely depressed or comatose states from any cause, and in association with or following MAO inhibitors; severe hypertensive or hypotensive heart disease.
Precautions: Hypersensitivity reactions (e.g., leukopenia, agranulocytosis) and convulsive seizures are infrequent. Pigmentary retinopathy has been observed where doses in excess of those recommended were used for long periods of time. May potentiate central nervous system depressants, atropine, and phosphorus insecticides. Where complete mental alertness is required, administer the drug cautiously and increase dosage gradually. In addition, orthostatic hypotension (especially in female patients) has been observed. Epinephrine should be avoided in treatment of drug-induced hypotension.
Side Effects: Pseudoparkinsonism and other extrapyramidal disorders are infrequent; drowsiness, especially in high doses early in treatment, may occur; nocturnal confusion, dryness of the mouth, nasal stuffiness, headache, peripheral edema, lactation, galactorrhea, and inhibition of ejaculation are noted on occasion; photosensitivity and other allergic skin reactions may occur but are extremely rare.
Before prescribing, see package insert for full product information.

in moderate to severe anxiety, 25 mg. t.i.d.

Mellaril®
(thioridazine)

SANDOZ


at the site of infection
(where it counts)...

Ilosone® provides more antibacterial activity than any other oral erythromycin

Acid stable, better absorbed... Ilosone produces faster, higher, more prolonged blood levels, even in the presence of food[1-3]

Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.[1,2] Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.[1,3]

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

700121

Ilosone®

Lilly

Erythromycin Estolate

(See next page for prescribing information.)

Ilosone®/the most active oral form of erythromycin

Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci on culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone.

Contraindications: Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with preexisting liver disease or dysfunction.

Side-Effects: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have appeared in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly if the drug is readministered to sensitive patients, usually within forty-eight hours. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to be definitely related to use of the drug, laboratory findings w characterized by increased direct-reacting bilirubin, elev alkaline phosphatase levels, negative or weakly positive ceph flocculation and thymol turbidity tests, elevated serum glut oxalacetic transaminase levels, peripheral eosinophilia, and mal cholecystograms.

Individual idiosyncrasy seems evident since jaundice has been reported in other patients taking prolonged courses of medication. Patients with chronic infection have been given to 2 Gm. of the drug daily for periods of two to six months, patients with rheumatic fever have taken prophylactic dose 0.5 Gm. daily for two years without difficulty. In one grou 144 patients who received the drug daily for two years, no ja dice was noted. It was of interest that members of six of t patients' families, who were not taking the drug, had epis of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels w determined in a group of fifty-four adults and children who 250 mg. of Ilosone daily for an average of sixteen month rheumatic fever prophylaxis. The results were compared those of a similar group of forty-four patients who received icillin. There were no cases of jaundice in either group. Eleva of SGPT and serum alkaline phosphatase levels during the co of treatment was observed in one patient treated with Ilo and in two patients treated with penicillin. Seven other pati in the group receiving Ilosone and four others in the penic group showed elevations in one of the tests at some time du administration of the drugs.

Very satisfactory therapeutic results, without toxicity, w reported in 102 pediatric patients who received short-term (day) courses of Ilosone in the treatment of streptococcus in tions. Results of liver function tests in these patients were parable to those in a similar control group who had rece penicillin.

Gastro-intestinal disturbances not associated with hepati fects are observed in a small proportion of individuals as a r of a local stimulating effect of the medication on the alimen tract; however, the normal intestinal gram-negative bact flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with the of erythromycin, there have been occasional reports of urtic skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally.

Ilosone Pulvules®
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Ilosone, 125, for Oral Suspension

For infants and for children under twenty-five pounds of weight, the usual dosage is 5 mg. per pound every six hours; children twenty-five to fifty pounds, 125 mg. every six ho (Tablets Ilosone Chewable should be chewed or crushed swallowed with water.)

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For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythrom therapy should be considered.

In the treatment of syphilis, the recommended total dosa 20 to 30 Gm. given in divided doses for a period of ten to fif days. Close follow-up of the patient is necessary since eryt mycin drugs have not had adequate evaluation in all stage syphilis. Examinations of spinal fluid are recommended as of the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four days recommended. In the treatment of gonorrhea, patients wi suspected lesion of syphilis should have a dark-field examina before receiving antibiotics, and monthly serologic tests sh be made for a period of three months.

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Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equiva to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size packa

References: 1. Griffith, R. S., and Black, H. R.: Am. J. M. Sc., *247*:69,
2. Griffith, R. S., and Black, H. R.: Antibiotics & Chemother., *12*:398,
3. Hirsch, H. A., Pryles, C. V., and Finland, M.: Am. J. M. Sc., *239*:198, 19

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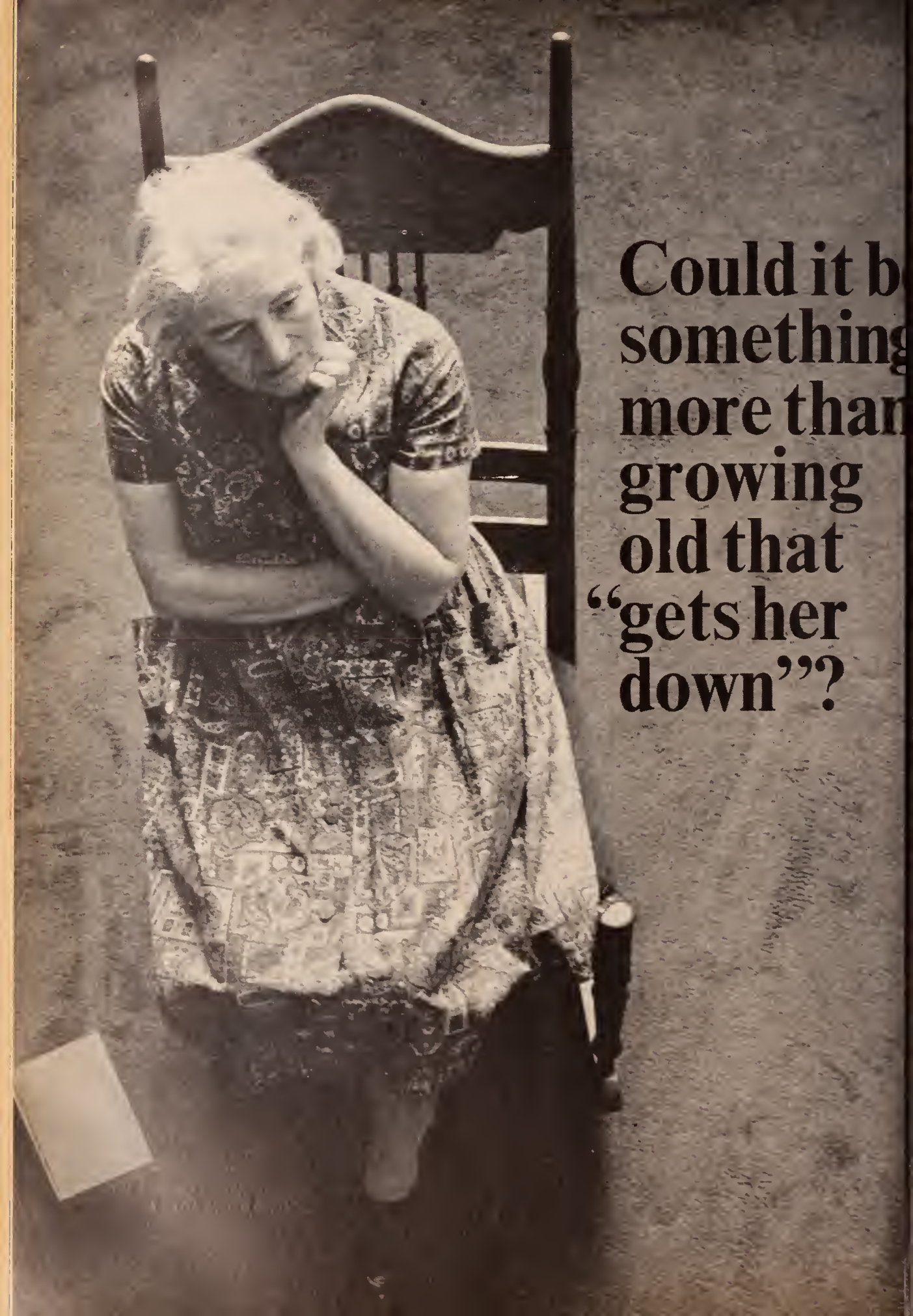
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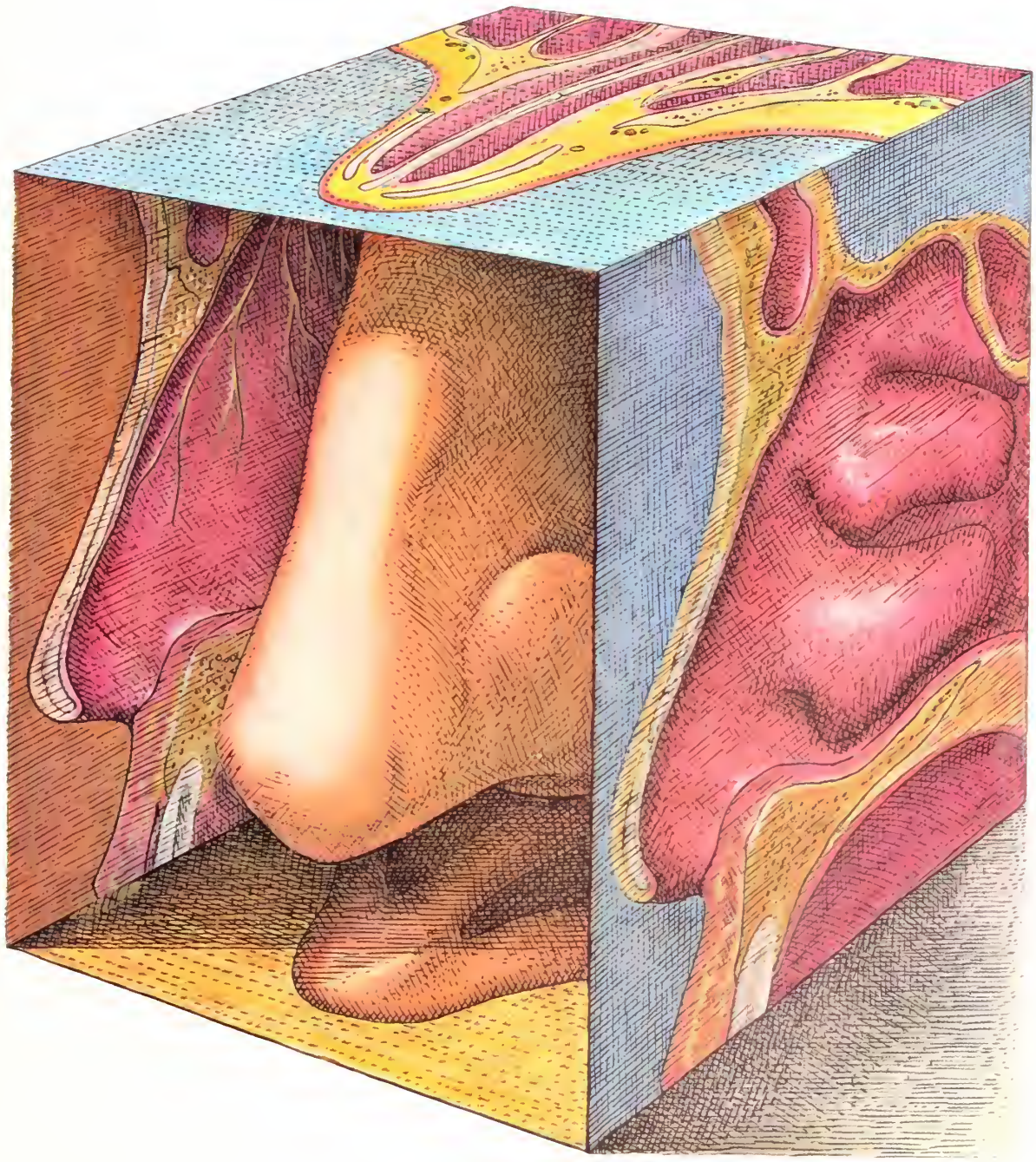
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this issue: the ubiquitous world of summer allergies



the ubiquitous world of summer allergies

Donald L. Unger, M.D. • Clinical Assistant Professor, Department of Medicine (Allergy), Stritch School of Medicine (Loyola).

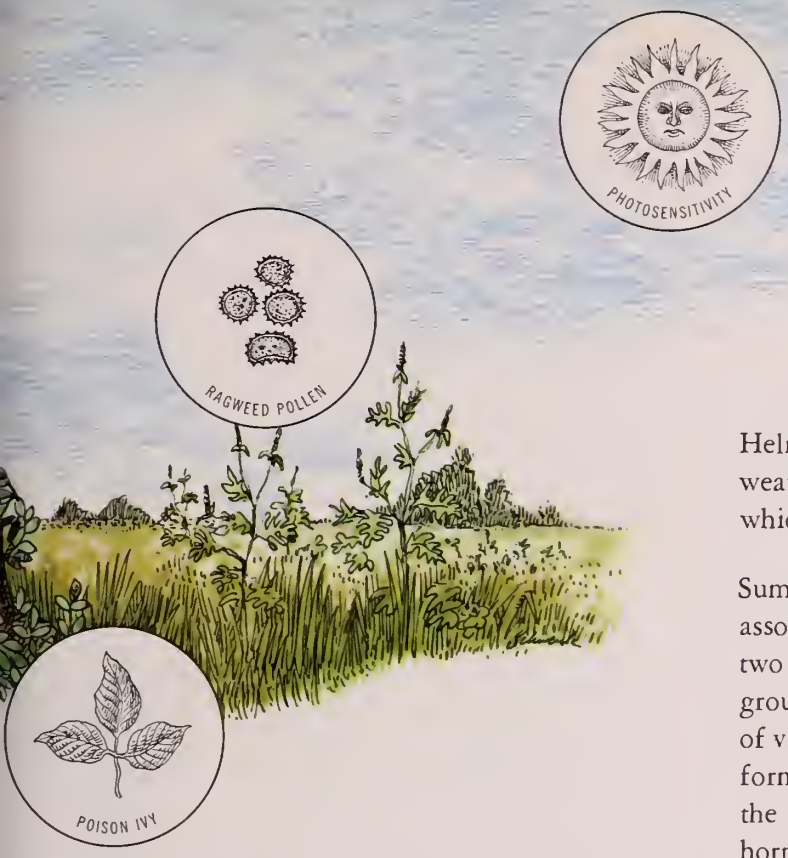
In the Spring a young man's fancy lightly turns to thoughts of—allergies. This is at least true of the 10% of the population who have hay fever and the 4% who have asthma.[1] The snow melts, the trees blossom and the noses run. Patients who were fine all winter may not be enthralled by the sight of the first robin or the blossoming of a crocus, for their appearances may precede the "sneezin' season."

Allergies in general can be divided into winter allergies and summer allergies. In the winter the main problems are inside the house: e.g. dogs, cats, dust and feathers. Houses in the northern half of the country become so dry that it becomes essential to add humidity to the home; this is a far cry from the damp summer months with the moldy basements and need for dehumidifiers.

Early in April trees begin to pollinate, with each tree having about a two week period of pollination. A particular patient may be sensitive to only one tree and thus have his hay fever for such a short time that he thinks he has a cold.[2] The entire tree season starts about April 1 and ends about Memorial Day, although all hay fever seasons are blurred and prolonged in the southern part of the country. Tree pollen is usually very heavy and a person may well have most of his exposure from those trees immediately surrounding his home.

Grasses pollinate from about May 15 until July 4, and cause "rose fever." Grass pollens are somewhat lighter and more buoyant than tree pollens, and are much more ubiquitous. While there are several varieties of grasses in the United States, they are so closely related antigenically that a person sensitive to one is generally sensitive to them all.[3] Thus, while the tree season is really several small seasons intertwined, the grass season will usually result in symptoms for a more prolonged period. Obviously, a grass-sensitive patient will have trouble only when grass is pollinating—he will have to think of another excuse not to mow the lawn after July 4.

Ragweed is the "Big Daddy" of them all in the eastern two-thirds of the country. Pollination is generally from mid-August until the end of September, with the predicted lower counts and longer seasons



in the southern part of the country. Ragweed is a very light pollen which may be windborne for hundreds of miles. An interesting study was made in New York City, in which 90% or more of the ragweed plants were destroyed in three of the five boroughs; pollen counts done during the season were virtually identical in all five.[4]

Ragweed is, of course, the most common cause of hay fever and is associated with an incredible loss of man hours from work each year. Many is the patient who travels to areas where the pollen count is low, just to avoid having symptoms. There is no ragweed anywhere in the world except the United States and portions of Canada and Mexico.

While molds are present through the year, the most important ones predominate from April until November. An old wives' tale has ragweed ending with the first frost, when actually it ends a good month earlier. It is Alternaria—the kingpin of the molds—that meets a sudden demise with the first frost. Alternaria-sensitive patients are in their glory when there is snow on the ground, and might be ideally suited to man the radar stations in Alaska. In September and October, Alternaria counts are at their highest, perhaps associated with the burning of leaves. Other molds such as Hormodendrum and Helminthosporium are associated with the warmer weather, as opposed to Penicillium and Aspergillus which are household molds.

Summer also means the return of our much maligned associates—bugs. Insects cause allergic symptoms by two methods: the bite or sting of the Hymenoptera group, and the inhalation of particles of the bodies of various insects. Wasp stings are the oldest known form of allergy, as they caused the death of one of the pharaohs in ancient Egypt.[5] Bees, wasps and hornets account for many deaths in this country, and those sensitive to them should carry special treatment kits at all times; a few minutes delay in the administration of epinephrine to such a patient, might be the difference between life and death. Inhalation of particles of insects may cause sneezing and wheezing in a susceptible individual.[6] Both of these forms of insect allergy may be benefitted by hyposensitization.

The insect recognizes no professional bounds. He is as apt to bite the physician as the patient. So this season, beware of bugs. And beware, too, of poison ivy. That pleasant stroll through the woods and underbrush with the Boy Scouts might turn into a

(Concluded on following page)

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nightmare for the botanically uninitiated in the causes of rhus dermatitis (poison ivy, poison oak and poison sumac). Although you may have been careful, your dog may not have noted that it wasn't clover he jumped through, but poison ivy. His return to your side may give you the rhus dermatitis that you so carefully avoided. That heavenly campfire may be emitting particles of rhus oil to produce an airborne contact dermatitis of the exposed areas of the body.

Another fascinating, but rather infrequent type of summer allergy is physical allergy. Some people sneeze on exposure to sunlight, while others break out in rashes, usually on the exposed parts of the body. These rashes may well follow the administration of various photosensitizing drugs, e.g. demethylchlortetracycline.[7] Another form of physical allergy and one that may be lethal in the summer, is cold allergy. Yes, I mean cold allergy, not heat allergy. The cool dip on a hot day with its consequent sudden chilling of the body, may be the coup de grace for a cold sensitive patient.[8] It is customary to write "heart attack" on the death certificate, even though the victim may have been an 18-year-old boy who looks like a Greek god.

Lest the reader be depressed by this saga of afflictions associated with the warmer months, perhaps he should remember that it is also a time for swimming, baseball, lying in the sun and taking that long-planned vacation. So let's all join in a chorus of "In the Good Old Summertime," as we sneeze, wheeze and scratch. Be careful of your suntan lotion, however; it may cause you a contact dermatitis.

References 1. Unger, L.: Bronchial asthma. Charles C. Thomas Co. p. 47, 1946. 2. Samter, M.: Immunological diseases. Little, Brown and Co. p. 513, 1965. 3. Wodehouse, R. P.: Antigenic analysis by gel diffusions: 2. Grass pollen. Int. Arch. Allerg. 6:65, 1955. 4. Cohart, E. M., and Kandle, R. P.: The Effects of a ragweed control program on ragweed pollen counts, J. Allergy **30**:287, 1959. 5. Woddell, L. S.: Egyptian civilization: Its origin and real chronology and Sumerian origin of Egyptian hieroglyphics. London: Luzak & Co. 1930. 6. Parlato, S. J.: The sandfly (Caddis fly) as an exciting cause of allergic coryza and asthma: II. Its relative frequency. J. Allergy 1:307, 1930. 7. Ozere, R. L.: Demethylchlortetracycline photosensitivity. Canad. M. A. J. **85**:1199, 1961. 8. Horton, B. T., Braun, G. E., and Roth, G. M.: Hypersensitiveness to colds, JAMA **107**:1263, 1936.

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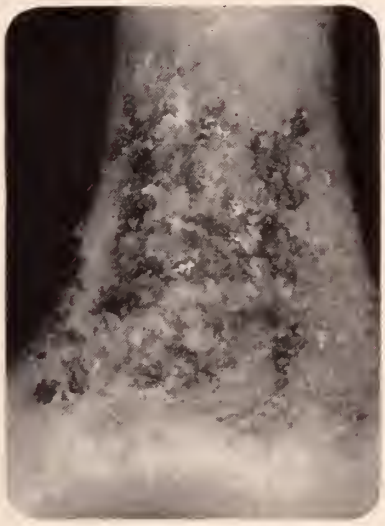
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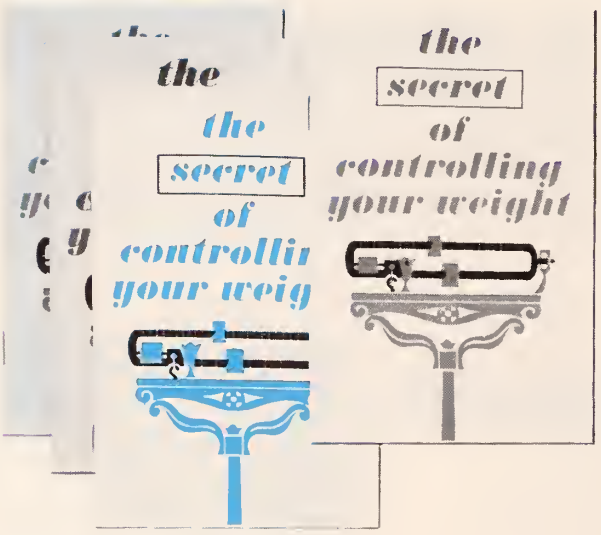
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Stress Formula Vitamins Lederle

FOR PROFESSIONAL RECOMMENDATION ONLY

Each capsule contains:	
Vitamin B_1 (as Thiamine Mononitrate)	10 mg
Vitamin B_2 (Riboflavin)	10 mg
Vitamin B_6 (Pyridoxine HCl)	2 mg
Vitamin B_{12} Crystalline	4 mcgm
Vitamin C (Ascorbic Acid)	300 mg
Niacinamide	100 mg
Calcium Pantothenate	20 mg

Recommended intake: Adults, 1 capsule daily, for the treatment of vitamin deficiencies. Supplied in decorative "reminder" jars of 30 and 100; bottles of 500.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York

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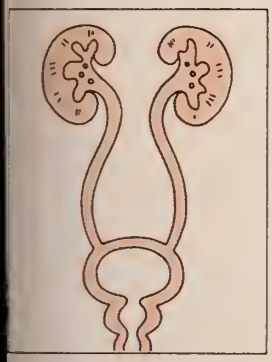
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When the battle with bacteria is in the G. U. tra

Artist's conception of acute infection
showing G.U. pathogens with predominance of *E. coli.*



consider Gantanol (sulfamethoxazole)



For vigorous treatment of G.U. infections before the invaders become entrenched... Gantanol (sulfamethoxazole) offers a comprehensive spectrum of antibacterial effectiveness against most common gram-negative as well as gram-positive invaders. In addition, it provides satisfactory concentrations in the blood and urine with ready diffusion into interstitial fluids for antibacterial activity at foci of bacterial invasion.

High antibacterial activity against *E. coli* and other common urinary pathogens... A review of 153 cases of acute G.U. infections reported in the literature shows that 90% responded to Gantanol (sulfamethoxazole), with over one-half of these patients showing excellent relief of symptoms.[1,2] Even in stubborn chronic G.U. infections, almost 60% of 450 patients improved on Gantanol (sulfamethoxazole), including many who had not responded to other antibacterials.[1-6]

Generally uncomplicated therapy enhances the favorable clinical results... Of the total 686 patients from the studies cited,[1-6] only three discontinued therapy because of side effects. Most of the side effects reported (approximately 3%) were mild and included nausea and/or vomiting, skin rash, dizziness, headache, gastritis, generalized uneasiness and itching.[1-6]

1. Peters, J. H.: *J. Urol.*, *87*:747, 1962. 2. Draper, J. W., *et al.*: *South. M. J.*, *57*:920, 1964. 3. Stewart, B. L.: *J. Urol.*, *87*:491, 1962. 4. Hagstrom, R. S.: *Rocky Mountain M. J.*, *59*:(2), 37, 1962. 5. Arnold, J. H.: *Clin. Med.*, *71*:552, 1964. 6. Nelson, C. G.: *Colorado GP*, *3*:(3), 2, 1961.

Before prescribing, please consult complete product information, a summary of which follows:

Contraindicated in sulfonamide-sensitive patients, pregnant females at term, premature infants, or newborn infants during first three months of life.

Warnings: Use only after critical appraisal in patients with liver damage, renal damage, urinary obstruction or blood dyscrasias. If toxic or hypersensitivity reactions or blood dyscrasias occur, discontinue therapy. In intermittent or prolonged therapy, blood counts and liver and kidney function tests should be performed.

Precautions: Observe usual sulfonamide therapy precautions, including maintenance of an adequate fluid intake. Use with caution in patients with histories of allergies and/or asthma. Patients with impaired renal function should be followed closely since renal impairment may cause excessive drug accumulation. Occasional failures may occur due to resistant microorganisms. Not effective in virus or rickettsial infections.

Adverse Reactions: Headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, Stevens-Johnson syndrome, injection of the conjunctiva and sclera, petechiae, purpura, hematuria or crystalluria may occur, in which case the dosage should be decreased or the drug withdrawn.

Dosage: Adults—4 tablets initially, then 2 tablets b.i.d. or t.i.d. depending upon severity of infection. Children—1 tablet/20 lbs initially, followed by ½ tablet/20 lbs b.i.d.

How Supplied: Tablets, 0.5 Gm, bottles of 50.

ROCHE

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Division of Hoffmann-La Roche Inc.
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when there are bacterial invaders in the bladder, prostate or kidneys

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(sulfamethoxazole)


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Destroys Trichomonads Wherever They Are

Flagyl seeks out the sites where trichomonads hide. Only a systemic agent can. Flagyl does, selectively and effectively.

Flagyl destroys trichomonads in the inner crypts, glands and cavities of the genitourinary tract in both women and men. Consequently, Flagyl is capable not only of curing trichomoniasis in women but also of preventing reinfection.

Correctly used, with due attention to repeat courses of treatment for resistant, deep-seated invasion and to the presumption of reinfection from male consorts, Flagyl has repeatedly produced up to 100 per cent cure in large series of patients.

When the diagnosis of trichomoniasis is positive, Flagyl is positive.

Dosage and Administration — In *women:* one 250-mg. oral tablet three times daily for ten days. A vaginal insert of 500 mg. is available for local therapy when desired. When used, one vaginal insert should be placed high in the vaginal vault each day for ten days; concurrently two oral tablets should be taken daily.

In *men* in whom trichomonads have been demonstrated: one 250-mg. oral tablet twice daily for ten days.

Contraindications — Pregnancy; disease of the central nervous system; evidence or history of blood dyscrasia.

Precaution—Complete blood cell counts should be made before, during and after therapy, especially if a second course is necessary.

Side Effects—Infrequent and minor side effects include nausea, metallic taste, furry tongue and headache. Other effects, all reported in an incidence of less than 1 per cent, are diarrhea, dizziness, vaginal dryness and burning, dry mouth, rash, urticaria, gastritis, drowsiness, insomnia, pruritus, sore tongue, darkened urine, anorexia, vomiting, epigastric distress, dysuria, depression, vertigo, incoordination, ataxia, abdominal cramping, constipation, stomatitis, numbness of an extremity, joint pains, confusion, irritability, weakness, flushing, cystitis, pelvic pressure, dyspareunia, fever, polyuria, incontinence, decreased libido, nasal congestion, proctitis and pyuria. Elimination of trichomonads may aggravate candidiasis.

SEARLE *Research in the Service of Medicine*

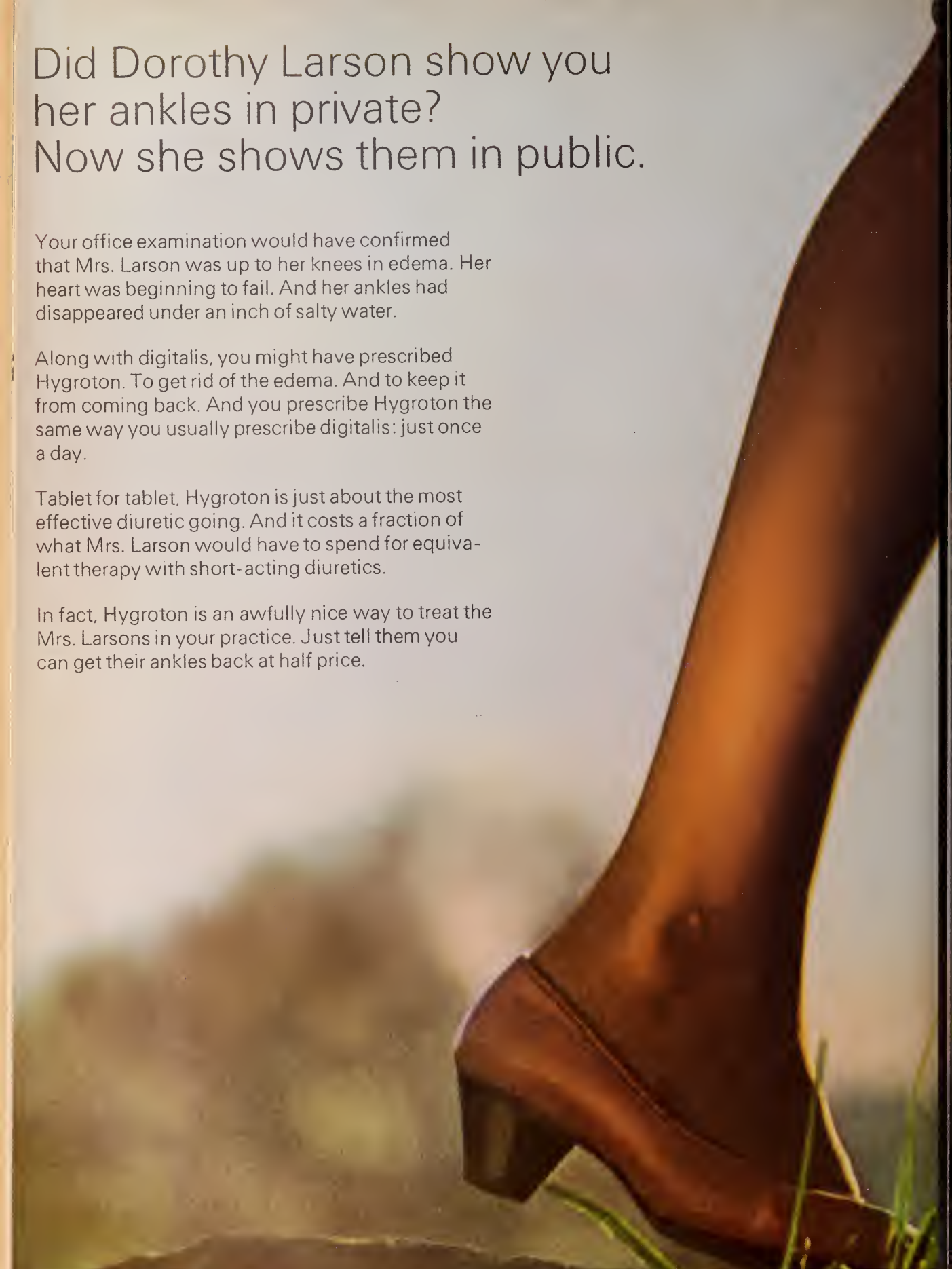
Did Dorothy Larson show you her ankles in private? Now she shows them in public.

Your office examination would have confirmed that Mrs. Larson was up to her knees in edema. Her heart was beginning to fail. And her ankles had disappeared under an inch of salty water.

Along with digitalis, you might have prescribed Hygroton. To get rid of the edema. And to keep it from coming back. And you prescribe Hygroton the same way you usually prescribe digitalis: just once a day.

Tablet for tablet, Hygroton is just about the most effective diuretic going. And it costs a fraction of what Mrs. Larson would have to spend for equivalent therapy with short-acting diuretics.

In fact, Hygroton is an awfully nice way to treat the Mrs. Larsons in your practice. Just tell them you can get their ankles back at half price.



Indications. Hypertension and many types of edema involving retention of salt and water

Contraindications. Hypersensitivity and most cases of severe renal or hepatic disease.

Warning. With administration of enteric-coated potassium supplements, the possibility of small bowel lesions should be kept in mind

Precautions. Reduce dosage of concomitant antihypertensive agents by at least one-half. Discontinue if BUN rises or liver dysfunction is aggravated. Electr imbalance and potassium depletion may occur; ta special care in cirrhosis or severe ischemic heart di


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chlorthalidone

...so you might say Hygroton is good public relations for Mrs. Larson

Because it gets her *out* in public in the first place. At 43, Mrs. Larson worries about appearances and swollen ankles don't help.

But Hygroton's cosmetic effect is only half the story. Hygroton and digitalis therapy helps her get back in the swing of things. Gives her a second wind. Gets rid of the extra pillow she needed for a good night's sleep. Now she even likes to take walks. Just for the fun of it!

When her troubles began, Mrs. Larson thought they were the signs of the change of life. It's a change all right, but one you can treat. And you can count on Hygroton to help keep her in public instead of in the hospital.

See preceding pages for brief summary of prescribing information.



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- In Mylanta, aluminum and magnesium hydroxides are balanced to minimize the chance of constipation or laxation and still achieve rapid acid neutralization and pain relief.
- The positive action of simethicone helps relieve the painful gas symptoms which often accompany the peptic ulcer syndrome.
- The nonfatiguing flavor and smooth, nongritty consistency of tablets and liquid encourage continued patient cooperation during long-term therapy.

Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) of liquid contains: magnesium hydroxide. 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg. **Dosage:** one or two tablets, well chewed or allowed to dissolve in the mouth, or one or two teaspoonfuls of liquid to be taken between meals and at bedtime.

The Stuart Company, Pasadena, California
Division of Atlas Chemical Industries, Inc.

Stuart

Sustained circulatory, respirator and cerebral stimulation for th

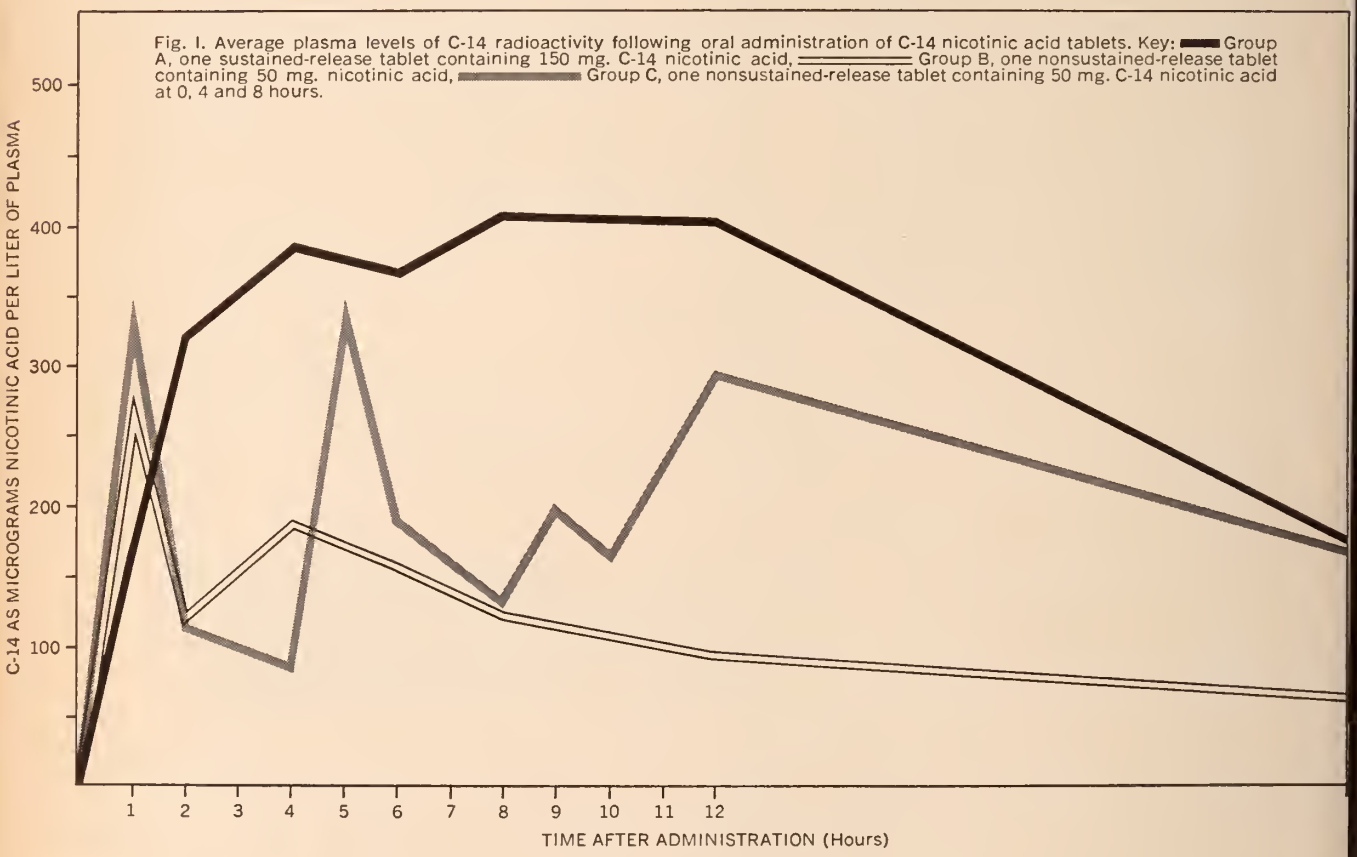


Fig. I. Average plasma levels of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: ▬ Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, ═══ Group B, one nonsustained-release tablet containing 50 mg. nicotinic acid, ▬ Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.



(fewer absent doses by absent-minded patients)

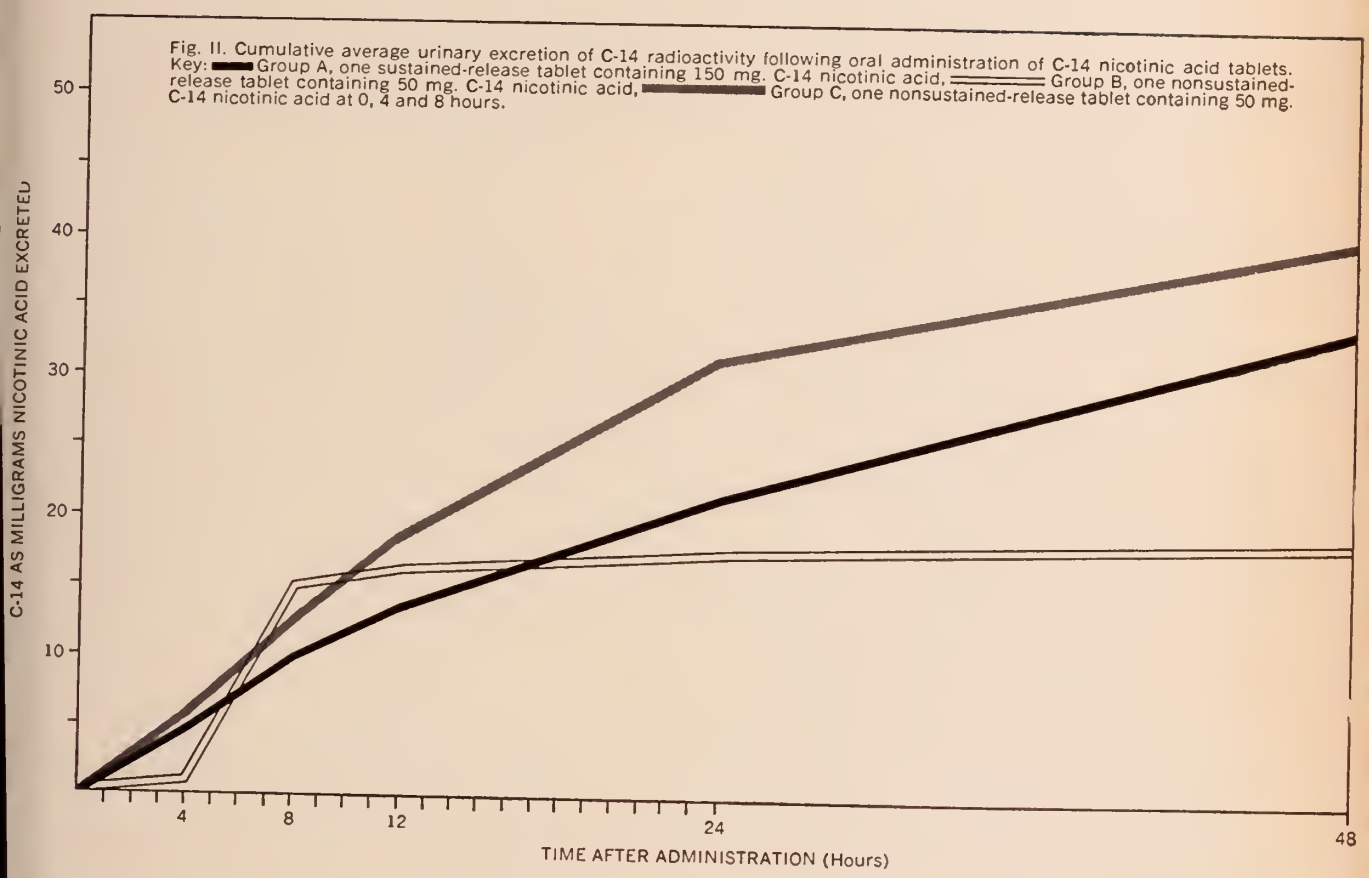
Human volunteer subjects were administered Geroniazol TT tablets with the nicotinic acid component made radioactive with C-14. Plasma and urine samples were analyzed. (See Figures I and II) The radioactive tracer study substantiated the previous clinical evidence that the release of nicotinic acid from the Geroniazol TT tablet produced a gradual rise in plasma levels to a plateau for a total of 12 hours and more.

Such proven sustained activity makes the management of geriatric patients much easier by minimizing the possibility of neglected doses through absent-mindedness or senile confusion. Therapy *can* be con tinuous on a daily dose of only one Geroniazol TT tab let every 12 hours.

The gradual release of nicotinic acid in Geroniazo TT will provide the well-known peripheral vasodilata tion needed in patients with deficient circulation an with a minimum amount (if any) of "flushing." Also cerebrovascular circulation is complemented by pen tylenetetrazol, long-established as a cerebral and res piratory stimulant.

Geroniazol TT improves the typical, unfortunate signs of senile confusion. Patients become more alert

ged and debilitated



less confused and moody. Personal care, memory, emotional stability, social attention improve. Fatigue, apathy and irritability are reduced.

A prescription for 100 tablets of Geroniazol TT will permit your patients to enjoy the benefits of time-prolonged nicotinic acid/pentylenetetrazol therapy, at an economical price. Dosage is only one tablet every 12 hours.

Contraindications: There are no known contraindications.

Precautions: Exercise caution when treating patients with a low convulsive threshold.

Side Effects: Side effects are rarely encountered, however due to the vasodilatation effect of nicotinic acid, transitory mild nausea, flushing, tingling and pruritus are possible.

Dosage: One tablet every 12 hours.

Supplied: Prescribe bottles of 100 tablets, to take advantage of recent price reduction.

References: 1. Report by Nuclear Science & Engineering Corp., Pittsburgh, Pa., in files of Philips Roxane Laboratories. 2. Connolly, R.: W. Virginia Med. J. *56*:263 (Aug.) 1960. 3. Curran, T. R., and Phelps, D. K.: Am. Pract. & Digest Treat. *11*:617 (July) 1960.

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whatever their color, shape, or size...

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for control of allergic symptoms



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BENADRYL is available in Kapseals® of 50 mg. and Capsules of 25 mg.

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OF MEDICINE

Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver-function tests advisable during protracted therapy.

Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral*—Adults: Mild and moderate anxiety and tension, 5 or 10 mg t.i.d. or q.i.d.; severe states, 20 or 25 mg t.i.d. or q.i.d. Geriatric patients: 5 mg b.i.d. to q.i.d. (See Precautions.)

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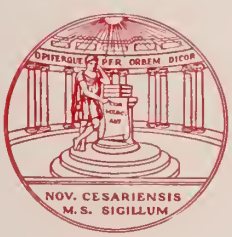
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the JOURNAL
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Look how many ways

Thorazine®

brand of

chlorpromazine

can help

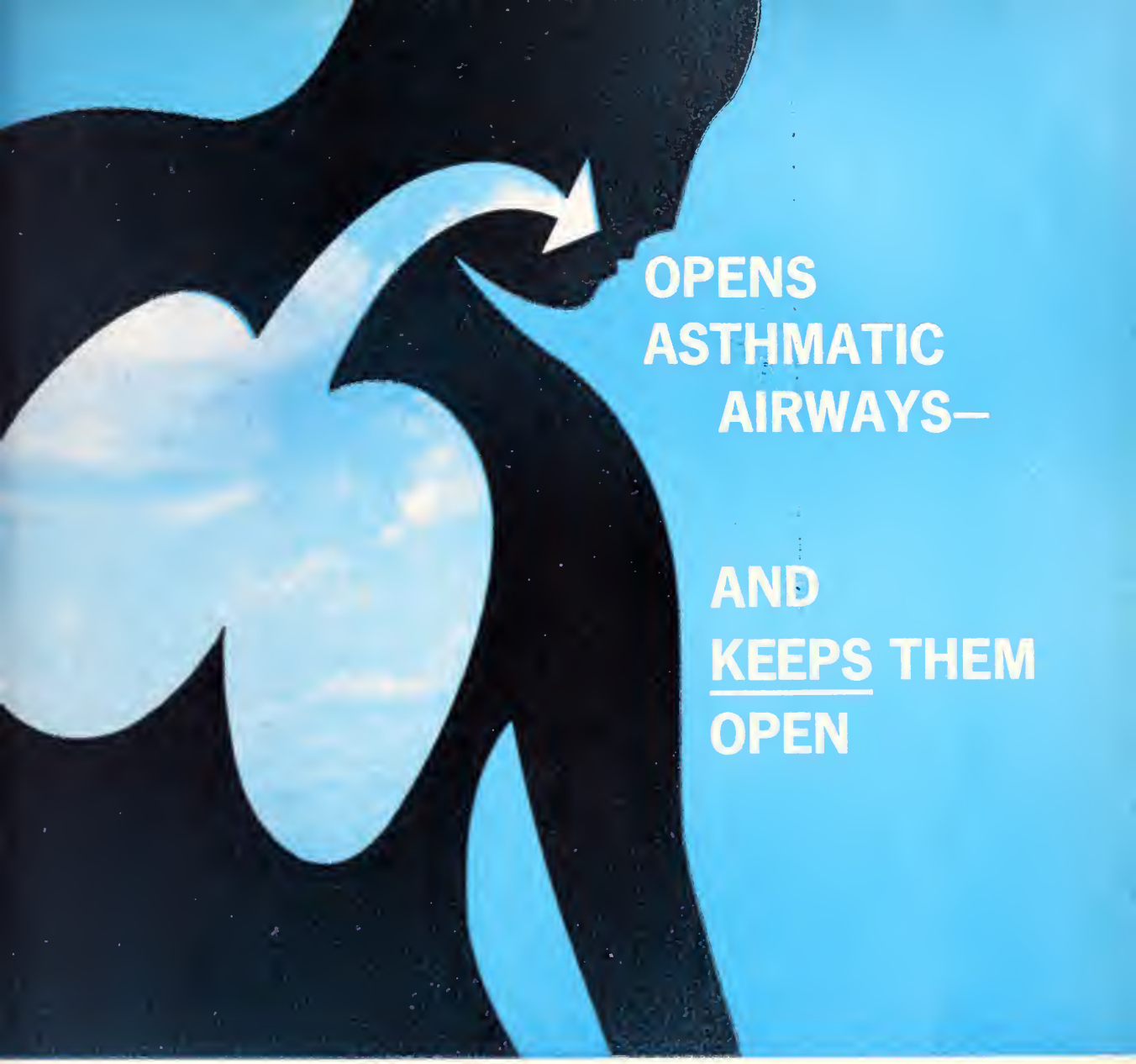
	Tranquilizer	Potentiator	Antiemetic
Agitation	●		
Alcoholism	●		●
Anxiety	●		
Cancer patients	●	●	●
Severe neurodermatitis	●		
Drug addiction withdrawal symptoms	●		●
Emotional disturbances (moderate to severe)	●		
Nausea & vomiting	●		●
Neurological disorders	●		
Obstetrics	●	●	●
Pain	●	●	●
Pediatrics	●	●	●
Porphyria	●	●	
Psychiatric disorders	●		
Hiccups—refractory	●		
Senile agitation	●		
Surgery	●	●	●
Tetanus	●	●	

'Thorazine' is useful as a specific adjuvant in the above named conditions.

The following is a brief precautionary statement. Before prescribing, the physician should be familiar with the complete prescribing information in SK&F literature or *PDR*. *Contraindications:* Comatose states or the presence of large amounts of C.N.S. depressants. *Precautions:* Potentiation of C.N.S. depressants may occur (reduce dosage of C.N.S. depressants when used concomitantly). Antiemetic effect may mask other conditions. Possibility of drowsiness should be borne in mind for patients who drive cars, etc. In pregnancy, use only when necessary to the welfare of the patient. *Side Effects:* Occasionally transitory drowsiness; dry mouth; nasal congestion; constipation; amenorrhea; mild fever; hypotensive effects, sometimes severe with I.M. administration; epinephrine effects may be reversed; dermatological reactions; parkinsonism-like symptoms on high dosage (in rare instances, may persist); weight gain; miosis; lactation and moderate breast engorgement (in females on high dosages); and less frequently cholestatic jaundice. Side effects occurring rarely include: mydriasis; agranulocytosis; skin pigmentation, lenticular and corneal deposits (after prolonged substantial dosages).

For a comprehensive presentation of 'Thorazine' prescribing information and side effects reported with phenothiazine derivatives, please refer to SK&F literature or *PDR*.

Smith Kline & French Laboratories SK&F



NUMA® DURA-TABS®

for *prolonged* aid to ventilation

Each Numa Dura-Tab provides:

theophylline	225 mg.
ephedrine HCl	50 mg.
butabarbital	25 mg.

(Warning: butabarbital may be habit-forming.)

Numa Dura-Tabs provide *prolonged* three-way action to ease breathing. Theophylline, a potent bronchodilator with minimal effect on the CNS, opens air passages and reduces bronchial spasm. Ephedrine HCl improves breathing capacity through its decongestant action. Butabarbital, a mild sedative, allays fear and apprehension.

Dosage: One Numa Dura-Tab every 8 to 12 hours helps keep the asthmatic patient symptom-free all day/all night.

Precautions: Use with caution in cardiovascular or hyperthyroid disease, severe hypertension, circulatory collapse, prostatic hypertrophy, or glaucoma.

WYNN Pharmaceuticals, Inc. Phila., Pa. 19132 • Manufacturers of QUINAGLUTE DURA-TABS®
(QUINIDINE GLUCONATE 5 gr.)

INFLAMMATION:
A cellular fight for life

A SYNTEX REPORT based on recently developed hypotheses about topical corticosteroids, including the cellular theories of inflammation by Thomas F. Dougherty, Ph.D., University of Utah.

You are looking at a fibroblast fighting for life. This cell—one of the most common found in connective tissue—has literally been poisoned by cytotoxins released from other cells that have ruptured. Soon, if the abnormal activity of this fibroblast does not cease, it, too, will rupture and die—one more casualty in the inflammatory wave of destruction precipitated by injury.

Until a short time ago no one had ever witnessed such a scene at the cellular level. Now, through advanced cinemicrographic techniques, it is possible to view and photograph the inflammatory process as produced experimentally in living animal tissue. This method permits new insight into the mechanism of inflammation and the role of corticosteroids in therapeutic management. Equally important, these techniques shed new light on factors that may make one corticosteroid more effective than another—factors that can be correlated with other chemical, biologic, and clinical parameters.

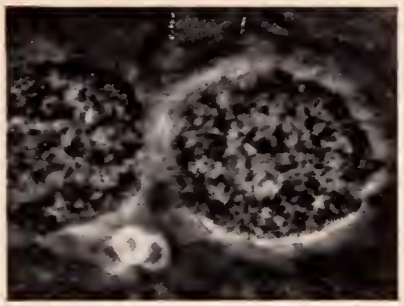


Visual evidence of how corticosteroids influence the inflammatory reaction

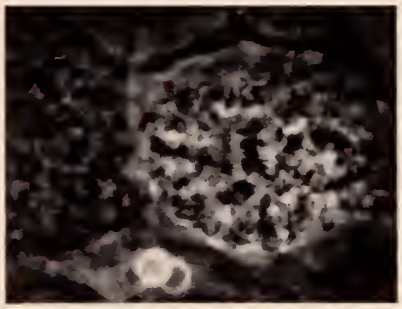
Working with phase-contrast cinemicrography on living animal tissue, Doctors Thomas F. Dougherty and David Berliner of the University of Utah College of Medicine have actually filmed cellular events that occur during the inflammatory reaction. This remarkable study* and additional work by these investigators, as well as by others, have established a new theoretical biologic basis for the antiinflammatory effect of the corticosteroids. (It must be noted that other theories, such as the lysosome or so-called "suicide bag" theory, have been postulated, although it is quite likely that there are more similarities than differences among the various theoretical models.)

The inflammatory wave of destruction

In this investigation an injurious injection of gelatin is used to set off an inflammatory reaction in living mouse tissue. What follows is a wave of destructive cellular activity that comprises the inflammatory response to injury. Mast cells (which contain heparin, serotonin and histamine) take up water, swell and rupture, releasing their contents, which are toxic outside the mast cell wall. These toxins, in turn, cause disintegration of other cells (such as fibroblasts) and the release of additional toxic material. Capillaries, too, take up water and leak unformed blood elements, causing edema. And polymorphonuclears, lymphocytes and perithelial cells invade the inflamed site. As a result of all these changes, the cellular environment reaches a state of turmoil.



Phase-contrast microscopy showing mast cell before injury.



Mast cell (after injury) has broken up and released cytotoxins.

How corticosteroids change the picture

Corticosteroids appear to virtually stop the abnormal cellular activity that constitutes the inflammatory reaction. This permits the body's natural resources to clear up the inflamed area and repair the damaged tissue. This interpretation is supported by the fact that when the injurious gelatin solution is injected simultaneously with a corticosteroid – Synalar (fluocinolone acetonide) – the inflammatory pattern simply does not develop.



Fibroblast in high state of activity, much distorted.



Mast cells showing effects of corticosteroid action: cells are normal in size, shape and activity.

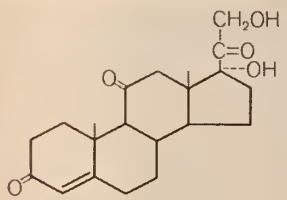


In summarizing his study Doctor Dougherty states: "...we also feel this work may explain why one corticosteroid helps a patient more rapidly and effectively than another. If it does, it is because one corticosteroid is the fastest, most effective inhibitor of the series of inflammatory events at the tissue level."

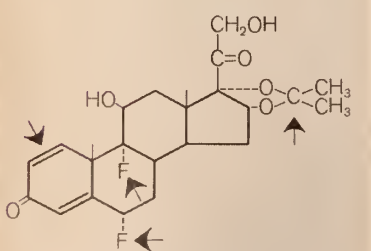
**A New View of Corticosteroid Action in Inflammatory Dermatoses*, a film based on this study, is now available from your Syntex representative.

How advances in chemical design have achieved greater steroid potency

The chemical modification of corticosteroid molecules from the advent of hydrocortisone to the development of Synalar (fluocinolone acetonide) is a prime example of how biochemists can "design" to increase therapeutic activity and minimize undesirable side actions. Below, for example, we see the important changes that were made in reference to the hydrocortisone molecule to produce fluocinolone acetonide, one of the most active of all topical corticosteroids. As a result, a 0.01% preparation of Synalar (fluocinolone acetonide) has been reported to do the work of a 1% hydrocortisone product containing 100 times more cortiscosteroid. And it can often do it more effectively.



Hydrocortisone

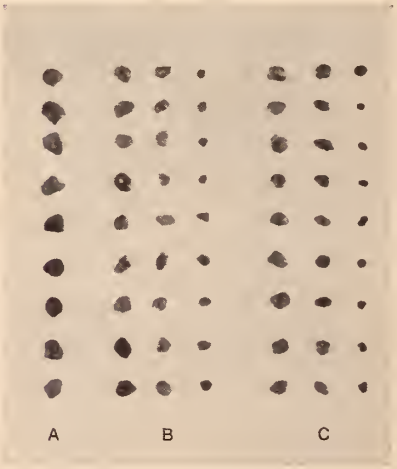


Fluocinolone Acetonide (Synalar)

- ☐ *a double bond between carbons 1 and 2*
- ☐ *fluorine substitutions at* both *the 6-α, and the 9-α positions*
- ☐ *the addition of the acetonide at the 16-α, 17-α positions, thus providing one of the most potent topical corticosteroids available.*

How bioassay tests are used to "predict" therapeutic potential

Biologic assays are another tool used by researchers to help establish the relative activity of corticosteroids. To date no single method of assaying corticosteroid activity has emerged as the ideal "yardstick" for predicting therapeutic potential. Taken together, however, these methods have proved useful. When such tests are run on various corticosteroids, a definite order of corticosteroid activity becomes evident. Compounds with the highest order of activity may be expected to merit clinical trial to establish their high therapeutic potential. When assayed by these methods, fluocinolone acetonide (Synalar) emerges as one of the most active topical corticosteroids, milligram for milligram, available for clinical application today.



THE THYMUS INVOLUTION ASSAY[1-4] is run on adrenalectomized rats. The sizes of the glands are measured, and the degree of involution caused by the steroid is determined as an indication of its potency. In the above photo, the comparative involution of thymus glands achieved with hydrocortisone and Synalar (fluocinolone acetonide) is shown. Untreated controls (A) show normal size. Group B – injected with 1, 2 and 4 mg. of hydrocortisone – show progressively smaller thymuses as does Group C – injected with fluocinolone acetonide – but with only 1/500th the dose of hydrocortisone.



THE ANTIGRANULOMA ASSAY[1-4] also utilizes adrenalectomized rats. Granulomas are induced by subcutaneous implantation of cotton pellets on either side of the thorax. The degree of granuloma inhibition achieved by a steroid reflects its potency. The above photo shows the inhibition of granuloma formation achieved with hydrocortisone and Synalar (fluocinolone acetonide). Untreated controls (A) show large, red granulomas adhering to the pellets. Group B, receiving hydrocortisone and Group C, receiving fluocinolone acetonide, show little, if any, granuloma formation. Fluocinolone acetonide produced the same effect as hydrocortisone with only 1/500th the dose. This assay, as well as the thymus involution assay, measures systemic rather than topical corticosteroid activity. Nevertheless, results by these methods correlate well with other assays and with the milligram potencies of topical steroids in current clinical use.

Worldwide clinical experience confirms the predictable therapeutic potential of Synalar

It is particularly gratifying that the promise of the advanced chemical design and high order of bioassay activity of Synalar (fluocinolone acetonide) has been confirmed by widespread therapeutic application. Indeed, the impressive clinical response rate of Synalar has been documented in no fewer than 232 papers from 22 countries.

Representative Clinical Results with Synalar*

Efficacy Documented in over 4,000 Patients

Condition	Number of Publications	Number of Patients	Significant Improvement†
Contact Dermatitis	27	750	713
Eczematous Dermatitis	21	472	409
Seborrheic Dermatitis	18	442	426
Atopic Dermatitis	24	460	426
Psoriasis	36	1,699	1,510
Neurodermatitis	18	351	324
Total	144	4,174	3,808

*Complete bibliography on request.

†Expressed by the authors as excellent, very good, good, complete remission of inflammation, etc.

PRESCRIBING INFORMATION

For initiation of therapy: Cream 0.025%, 5 and 15 Gm. tubes, 425 Gm. jars; *for emollient effect:* Ointment 0.025%, 15 Gm. tubes; *for maintenance therapy:* Cream 0.01%, 15 and 45 Gm. tubes, 120 Gm. jars; *for intertriginous or hairy sites:* Solution 0.01%, 20 cc. and 60 cc. plastic squeeze bottles; *for infected inflammatory dermatoses:* Neo-Synalar® Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes. CONTRAINDICATIONS: Tuberculous, fungal, and most viral lesions of the skin, (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. PRECAUTIONS: Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. When severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. SIDE EFFECTS: Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. The neomycin in Neo-Synalar Cream rarely produces allergic reactions.

REFERENCES: 1. Lerner, L. J., Bianchi, A., Turkheimer, A. R., Singer, F. M., and Borman, A.: Anti-inflammatory steroids: potency, duration and modification of activities. Ann NY Acad Sci 116:1071 (Aug. 27) 1964. 2. Idem: Comparison of anti-granuloma, thymolytic and glucocorticoid activities of anti-inflammatory steroids. Proc Soc Exp Biol Med 116:385 (June) 1964. 3. Ringler, A.: Activities of adrenocorticosteroids in experimental animals and man, in Dorfman, R. I.: Methods of hormone research, New York, Academic Press, 1964. vol. III. pp. 234-280. 4. Gubersky, V. R.: To be published.

fluocinolone acetonide — an original steroid from

SYNTEX LABORATORIES INC., PALO ALTO, CALIF.

For inflammatory dermatoses... by any measure a topical corticosteroid of choice

Synalar® (fluocinolone acetonide)

Milligram for milligram one of the most active topical corticosteroids available

Rapid and predictable in antiinflammatory and antipruritic activity

Results often comparable to those of systemic corticosteroids with fewer hazards

mudrane®

for

- EMPHYSEMA
- ASTHMA
- CHRONIC BRONCHITIS
- BRONCHIECTASIS

The fast-disintegrating uncoated tablet gives relief in 15 minutes

Each tablet contains:

Potassium Iodide	195 mg.
Aminophylline	130 mg.
Phenobarbital, Caution: May be habit forming...	21 mg.
Ephedrine HCl	16 mg.

FEDERAL LAW PROHIBITS
DISPENSING WITHOUT PRESCRIPTION

Precautions: Usual for aminophylline-ephedrine-phenobarbital. Iodides may cause nausea, long use may cause goiter. Discontinue if symptoms of iodism develop.

Iodide contraindications: tuberculosis, pregnancy.

DOSAGE

One tablet, with full glass of water, 3 or 4 times daily.

Dispensed in bottles of 100 and 1000 tablets.

MUDRANE GG—Formula, dosage and package identical to Mudrane—*except*—100 mg. glyceryl guaiacolate replaces the potassium iodide. The value of Mudrane cannot be enjoyed by a small group in which K.I. is contraindicated. Mudrane GG is prepared for this group.

MUDRANE GG ELIXIR—Four 5 cc teaspoonfuls is equivalent to one Mudrane GG tablet. Dosage adjusted to age and weight of child. Mudrane GG Elixir is for pediatric patients and those who think they cannot swallow tablets. Dispensed in pint and half gallon bottles.

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217
Manufacturers of ethical pharmaceuticals since 1856

Tandearil®

oxyphenbutazone

Therapeutic Effects: Tandearil is a nonhormonal compound which may rapidly resolve inflammation and help restore normal joint function. Its action does not affect pituitary-adrenal function or impair immune responses. Its value in osteoarthritis is especially noteworthy because this disorder responds inconsistently to steroids and is often resistant to salicylates. Further, indomethacin is limited only to osteoarthritis of the hip, whereas oxyphenbutazone is effective in all forms of the disease.

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should be closely supervised and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage. Make regular blood counts. Discontinue the drug and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The most common are nausea, edema and drug rash. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, or a generalized allergic reaction may occur and require withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Osteoarthritis: The initial daily dosage in adults is 300-600 mg. in divided daily doses. When improvement occurs, dosage should be decreased to the minimum effective level; this should not exceed 400 mg. daily, and is often achieved with only 100-200 mg. daily.

For complete details, please refer to full prescribing information. 6562-VI(B)R

Availability: Tablets of 100 mg.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York

Geigy

Tandearil®
oxyphenbutazone

helps osteoarthritic joints move again



3 out of 4 osteoarthritics completely or markedly improved

Sperling, I.L.: 3 Years' Experience with Oxyphenbutazone in the Treatment of Rheumatic Disorders, Applied Therapeutics 6:117, 1964.	76.9% of 407 patients
Watts, T.W., Jr.: Treatment of Rheumatoid Disorders with Oxyphenbutazone, Clin. Med. 73:65, 1966.	84.6% of 39 patients

Please see adjoining page for brief prescribing summary

TA-4919 PC

Why these 7 patients with moderate to severe anxiety may respond better to Mellari



1. The agitated patient.
Anxiety—particularly that beyond t range of minor tranquilizers—fr quently is expressed as gross mot restlessness, fidgetiness and purpos less movements, and may erupt in aggressive behavior. Mellaril is most a specific for those patien whose anxiety follows such a patter



. The psychosomatic patient.

he family physician is rarely given e diagnostic luxury of a classic, xtbook "anxiety state." Most often must probe for anxiety masked by functional disorder—or which exac-bates a somatic problem. Double-ind evaluations have demonstrated at Mellaril can be a significant ad-unct in the treatment of such patients.



. The patient under ituational stress.

ellaril helps the patient deal with resses of everyday life. Nonhabitu-ing, it can be given for extended pe-ods of time. It does not "separate" e patient from practical problems nd pressures, does not induce eupho-a or a fuzziness which can compro-mise the ability to cope with reali-ties. Rather, it helps the patient move more competently in his daily world by eliminating use-less tension, by allowing him to conserve emotional resources and energies, and to direct them against the problems really worth worrying about.



4. The menopausal patient.

The woman who sees change of life as the end of useful life requires support from both family and family physician. Whether the psychological impact of menopause is directly related to hormonal changes, or merely coincidental, is debatable, but estrogenic therapy is frequently inadequate. Mellaril is a useful aid for these patients and, alone, or in combination with reduced estrogen dosage, will help ease the menopausal misery.



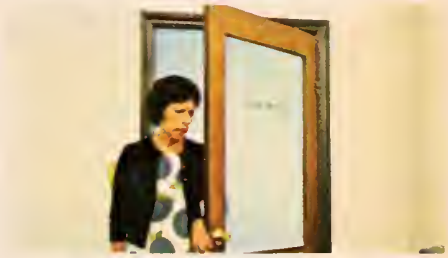
5. The previously hospitalized psychiatric patient.

Such a patient may still require the type of medication he has been accustomed to, but because he is no longer in a controlled setting the acceptable level of adverse reactions must be lower. In such circumstances Mellaril is perhaps the drug of choice.



6. The agitated geriatric.

Tranquilizer therapy in the elderly patient always involves special (or at least accentuated) problems: the possibility of drug-induced ataxia, hypotension or depression, for example, assumes an additional significance. These reactions have rarely been observed in geriatric patients treated with Mellaril.



7. The constantly returning patient.

The anxiety patient who has not responded to a minor tranquilizer is not very likely to benefit from your minor tranquilizer of second choice. A major tranquilizer, such as Mellaril, may be indicated in such patients.

Contraindications: Severely depressed or comatose states from any cause, and in association with or following MAO inhibitors, severe hypertensive or hypotensive heart disease.

Precautions: Hypersensitivity reactions (e.g., leukopenia, agranulocytosis) and convulsive seizures are infrequent. Pigmentary retinopathy has been observed where doses in excess of those recommended were used for long periods of time. May potentiate central nervous system depressants, atropine, and phosphorus insecticides. Where complete mental alertness is required, administer the drug cautiously and increase dosage gradually. In addition, orthostatic hypotension (especially in female patients) has been observed. Epinephrine should be avoided in treatment of drug-induced hypotension.

Side Effects: Pseudoparkinsonism and other extrapyramidal disorders are infrequent; drowsiness, especially in high doses early in treatment, may occur; nocturnal confusion, dryness of the mouth, nasal stuffiness, headache, peripheral edema, lactation, galactorrhea, and inhibition of ejaculation are noted on occasion, photosensitivity and other allergic skin reactions may occur but are extremely rare.

Before prescribing, see package insert for full product information.

in moderate to severe anxiety, 25 mg. t.i.d.

Mellaril®
(thioridazine)

SANDOZ


Bartholin's gland
Periurethral glands
Cervical glands
Flagyl®
brand of
metronidazole
Seminal vesicles
Bladder
Prostate gland

Destroys Trichomonads Wherever They Are

Flagyl seeks out the sites where trichomonads hide. Only a systemic agent can. Flagyl does, selectively and effectively.

Flagyl destroys trichomonads in the inner crypts, glands and cavities of the genitourinary tract in both women and men. Consequently, Flagyl is capable not only of curing trichomoniasis in women but also of preventing reinfection.

Correctly used, with due attention to repeat courses of treatment for resistant, deep-seated invasion and to the presumption of reinfection from male consorts, Flagyl has repeatedly produced up to 100 per cent cure in large series of patients.

When the diagnosis of trichomoniasis is positive, Flagyl is positive.

Dosage and Administration — In *women:* one 250-mg. oral tablet three times daily for ten days. A vaginal insert of 500 mg. is available for local therapy when desired. When used, one vaginal insert should be placed high in the vaginal vault each day for ten days; concurrently two oral tablets should be taken daily.
In *men* in whom trichomonads have been demonstrated: one 250-mg. oral tablet twice daily for ten days.

Contraindications — Pregnancy; disease of the central nervous system; evidence or history of blood dyscrasia.

Precaution—Complete blood cell counts should be made before, during and after therapy, especially if a second course is necessary.

Side Effects—Infrequent and minor side effects include nausea, metallic taste, furry tongue and headache. Other effects, all reported in an incidence of less than 1 per cent, are diarrhea, dizziness, vaginal dryness and burning, dry mouth, rash, urticaria, gastritis, drowsiness, insomnia, pruritus, sore tongue, darkened urine, anorexia, vomiting, epigastric distress, dysuria, depression, vertigo, incoordination, ataxia, abdominal cramping, constipation, stomatitis, numbness of an extremity, joint pains, confusion, irritability, weakness, flushing, cystitis, pelvic pressure, dyspareunia, fever, polyuria, incontinence, decreased libido, nasal congestion, proctitis and pyuria. Elimination of trichomonads may aggravate candidiasis.

SEARLE *Research in the Service of Medicine*

Did Dorothy Larson show you her ankles in private? Now she shows them in public.

Your office examination would have confirmed that Mrs. Larson was up to her knees in edema. Her heart was beginning to fail. And her ankles had disappeared under an inch of salty water.

Along with digitalis, you might have prescribed Hygroton. To get rid of the edema. And to keep it from coming back. And you prescribe Hygroton the same way you usually prescribe digitalis: just once a day.

Tablet for tablet, Hygroton is just about the most effective diuretic going. And it costs a fraction of what Mrs. Larson would have to spend for equivalent therapy with short-acting diuretics.

In fact, Hygroton is an awfully nice way to treat the Mrs. Larsons in your practice. Just tell them you can get their ankles back at half price.



Indications. Hypertension and many types of edema involving retention of salt and water

Contraindications. Hypersensitivity and most cases of severe renal or hepatic disease.

Warning. With administration of enteric-coated potassium supplements, the possibility of small bowel lesions should be kept in mind.

Precautions. Reduce dosage of concomitant antihypertensive agents by at least one-half. Discontinue if th BUN rises or liver dysfunction is aggravated. Electrol imbalance and potassium depletion may occur, take special care in cirrhosis or severe ischemic heart dise


Hygroton®
chlorthalidone

...so you might say Hygroton is good public relations for Mrs. Larson

Because it gets her *out* in public in the first place. At 43, Mrs. Larson worries about appearances and swollen ankles don't help.

But Hygroton's cosmetic effect is only half the story. Hygroton and digitalis therapy helps her get back in the swing of things. Gives her a second wind. Gets rid of the extra pillow she needed for a good night's sleep. Now she even likes to take walks. Just for the fun of it!

When her troubles began, Mrs. Larson thought they were the signs of the change of life. It's a change all right, but one you can treat. And you can count on Hygroton to help keep her in public instead of in the hospital.

See preceding pages for brief summary of prescribing information.



Geigy

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York

WILLIAM TAYLOR IS BIG ON FAD DIETS.

Bill knows all the latest schemes for losing weight.

He's a big loser.

He loses time. And money. And maybe even his best chance to do something sensible about his size.

Because like most faddists, Bill isn't building new habits. He'll simply bounce back to his old routine —and with every rebound make real weight control more difficult.

That's what started Project Weight Watch.

That's what prompted preparation of research-tested scientific diets which are offered to you free. They're a realistic balance of the 4 food groups—meat, bread and cereals, fruits and vegetables and dairy foods. They're diets that you'd write yourself, if you had the time.

Send for them. Help stamp out big Bills.



Send me the Project Weight Watch kit of materials including diets.

Name _____

Position _____

Address _____

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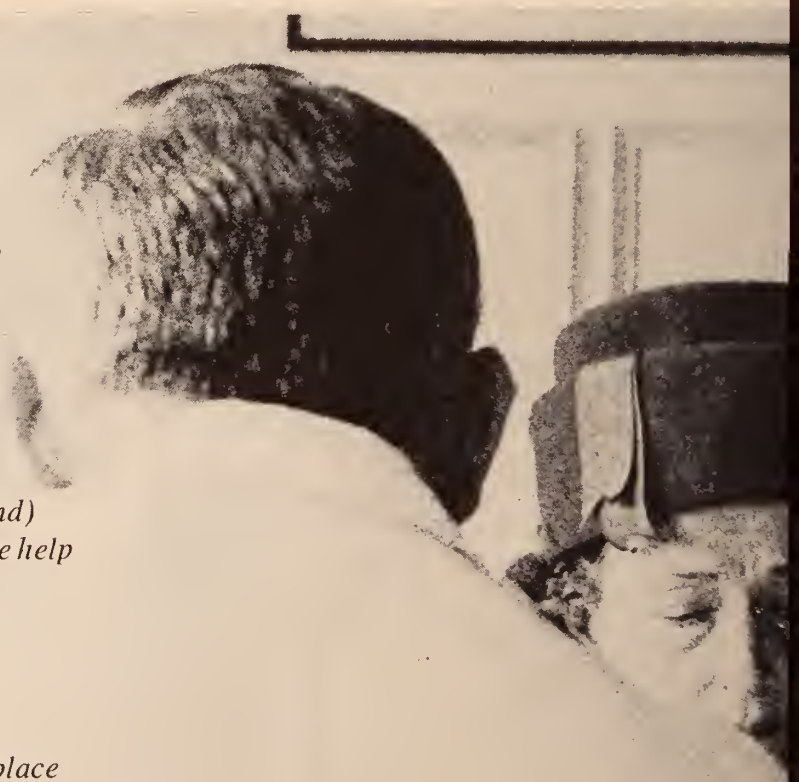
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100 Halsted Street
East Orange, New Jersey 07018

PROJECT WEIGHT WATCH

FACTS, NOT FADS

The Mediatric Age:

There is a growing senescent body of people on their way to malignant inactivity, who sorely need your interest and direction to help them back to a more active and useful life. There are medicines too, designed to help. One such has proved useful in clinical practice.



"A steroid-nutritional compound (Mediatric) was used in 100 patients to relieve some of the symptoms caused by degenerative changes of aging . . . This therapy resulted in improvement of 75 per cent of the patients . . ."

McNeill, A. J.: Clin. Med. *8*:518 (Mar.) 1961.

"Mediatric (steroid-nutritional compound) capsules, one a day, seem to give definite help to debilitated patients."

Arnold, E. T., Jr.: Geriatrics *12*:612 (Oct.) 1957.

"Nutritional and hormone bolstering of function in the aged may have a useful place in geriatrics."

Morgan, A. F.: Gerontologist 2:77 (June) 1962.

"In diets which for any reason are restricted in calories, enough of these substances (B vitamins) may not be supplied . . . The use of B and C vitamin supplements may then be justified and indeed may be necessary."

Morgan, A. F.: Gerontologist 2:77 (June) 1962.

"Intensive nutritional therapy is necessary, especially in elderly people, to correct dietary deficiencies created by large losses of protein, vitamins and other nutrients."

Riccitelli, M. L.: J. Am. Geriatrics Soc. *12*:489 (May) 1964.

Mediatric®

Designed for the "metabolically spent"

Nutritional reinforcement for those who can't – or won't – eat properly...balanced amounts of estrogen and androgen to counteract declining gonadal hormone secretion and its sequelae of premature degenerative changes...mild antidepressant for a gentle "mood" uplift...

The estrogen component in MEDIATRIC is PREMARIN® (conjugated estrogens—equine), the natural estrogen most widely prescribed for its superior physiologic and metabolic benefits.

MEDIATRIC also provides *nutritional reinforcement—blood-building factors and vitamin supplementation.* It contributes a *gentle "mood" uplift* through methamphetamine HCl.

Three different dosage forms—Liquid, Tablets, and Capsules—offer convenience and variety.

MEDIATRIC Liquid

Each 15 cc. (3 teaspoonfuls) contains:

*Conjugated estrogens—equine (Premarin®)	0.25 mg.
Methyltestosterone	2.5 mg.
Thiamine HCl	5.0 mg.
Cyanocobalamin	1.5 mcg.
Methamphetamine HCl	1.0 mg.

Contains 15% alcohol

MEDIATRIC Tablets and Capsules

Each MEDIATRIC Tablet or Capsule contains:

*Conjugated estrogens—equine (Premarin®)	0.25 mg.
Methyltestosterone	2.5 mg.
Ascorbic acid	100.0 mg.
Cyanocobalamin	2.5 mcg.
Intrinsic factor concentrate	8.0 mg.
Thiamine mononitrate	10.0 mg.
Riboflavin	5.0 mg.
Niacinamide	50.0 mg.
Pyridoxine HCl	3.0 mg.
Calc. pantothenate	20.0 mg.
Ferrous sulfate exsic.	30.0 mg.
Methamphetamine HCl	1.0 mg.

*Orally active, water-soluble conjugated estrogens derived from pregnant mares' urine and standardized in terms of the weight of active, water-soluble estrogen content.

MEDIATRIC helps keep the older patient alert and active; helps relieve general malaise, easy fatigability, vague pains in the bones and joints, loss of appetite, and lack of interest usually associated with declining gonadal hormone secretion.

CONTRAINDICATION: Carcinoma of the prostate, due to methyltestosterone component.

WARNING: Some patients with pernicious anemia may not respond to treatment with the Tablets or Capsules, nor is cessation of response predictable. Periodic examinations and laboratory studies of pernicious anemia patients are essential and recommended.

SIDE EFFECTS: In addition to withdrawal bleeding, breast tenderness or hirsutism may occur.

SUGGESTED DOSAGES: *Male and female:* 3 teaspoonfuls of Liquid, 1 Tablet, or 1 Capsule, daily or as required.

In the female: To avoid continuous stimulation of breast and uterus, cyclic therapy is recommended (3 week regimen with 1 week rest period—Withdrawal bleeding may occur during this 1 week rest period).

In the male: A careful check should be made on the status of the prostate gland when therapy is given for protracted intervals.

SUPPLIED: No. 910 – MEDIATRIC Liquid, in bottles of 16 fluidounces and 1 gallon. No. 752 – MEDIATRIC Tablets, in bottles of 100 and 1,000. No. 252 – MEDIATRIC Capsules, in bottles of 30, 100, and 1,000.



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When eating fads of teens or tots Lead to a sudden case of "trots"

Parepectolin for quick relief of acute diarrhea
... soothes colicky pain with paregoric*
... consolidates fluid stools with pectin
... adsorbs irritants with kaolin,
and protects intestinal mucosa

In children, Parepectolin may be used to control diarrhea promptly and prevent dehydration, until etiology has been determined. In some cases, Parepectolin may be all the therapy necessary.

Parepectolin®

Each fluid ounce of creamy white suspension contains:
*Paregoric (equivalent) . . . . . (1.0 dram) 3.7 ml.
Contains opium (¼ grain) 15 mg. per fluid ounce.
warning: may be habit forming
Pectin . . . . . (2½ grains) 162 mg.
Kaolin (specially purified) . . . . (85 grains) 5.5 Gm.
(alcohol 0.69%)
Usual Children's Dose: One or two teaspoonfuls three times daily.

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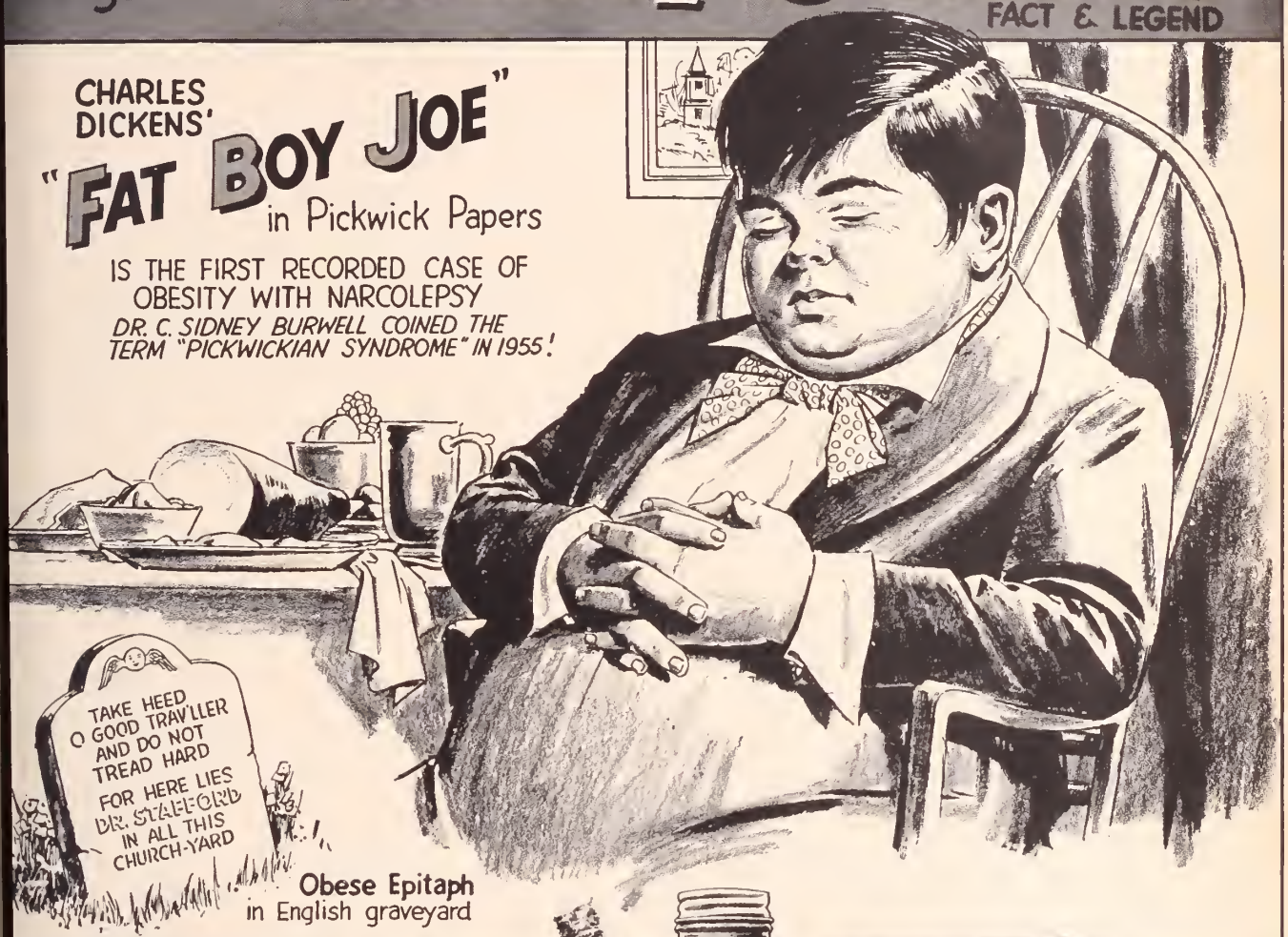
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The AMBAR SCRAPBOOK of Obesity Oddities
FACT & LEGEND

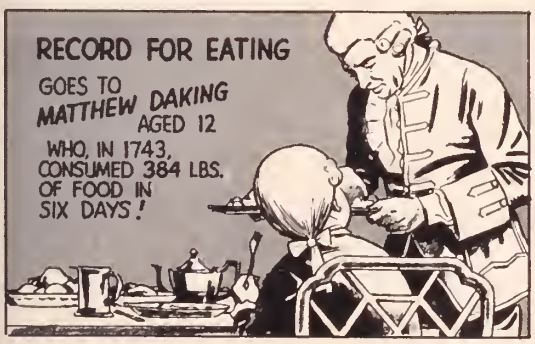
CHARLES DICKENS'
"FAT BOY JOE"
in Pickwick Papers

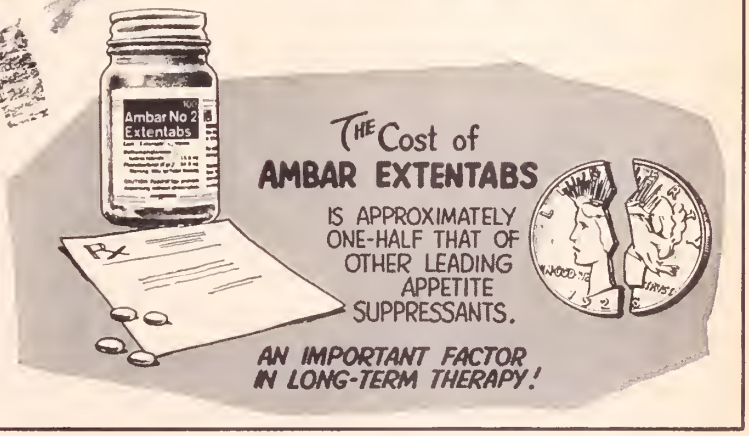
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DR. C. SIDNEY BURWELL COINED THE TERM "PICKWICKIAN SYNDROME" IN 1955!



Obese Epitaph in English graveyard





ONTROL FOOD AND MOOD ALL DAY LONG WITH A SINGLE MORNING DOSE

AMBAR #2 EXTENTABS®

methamphetamine HCl 15 mg., phenobarbital 64.8 mg. (1 gr.)
(Warning: may be habit forming).

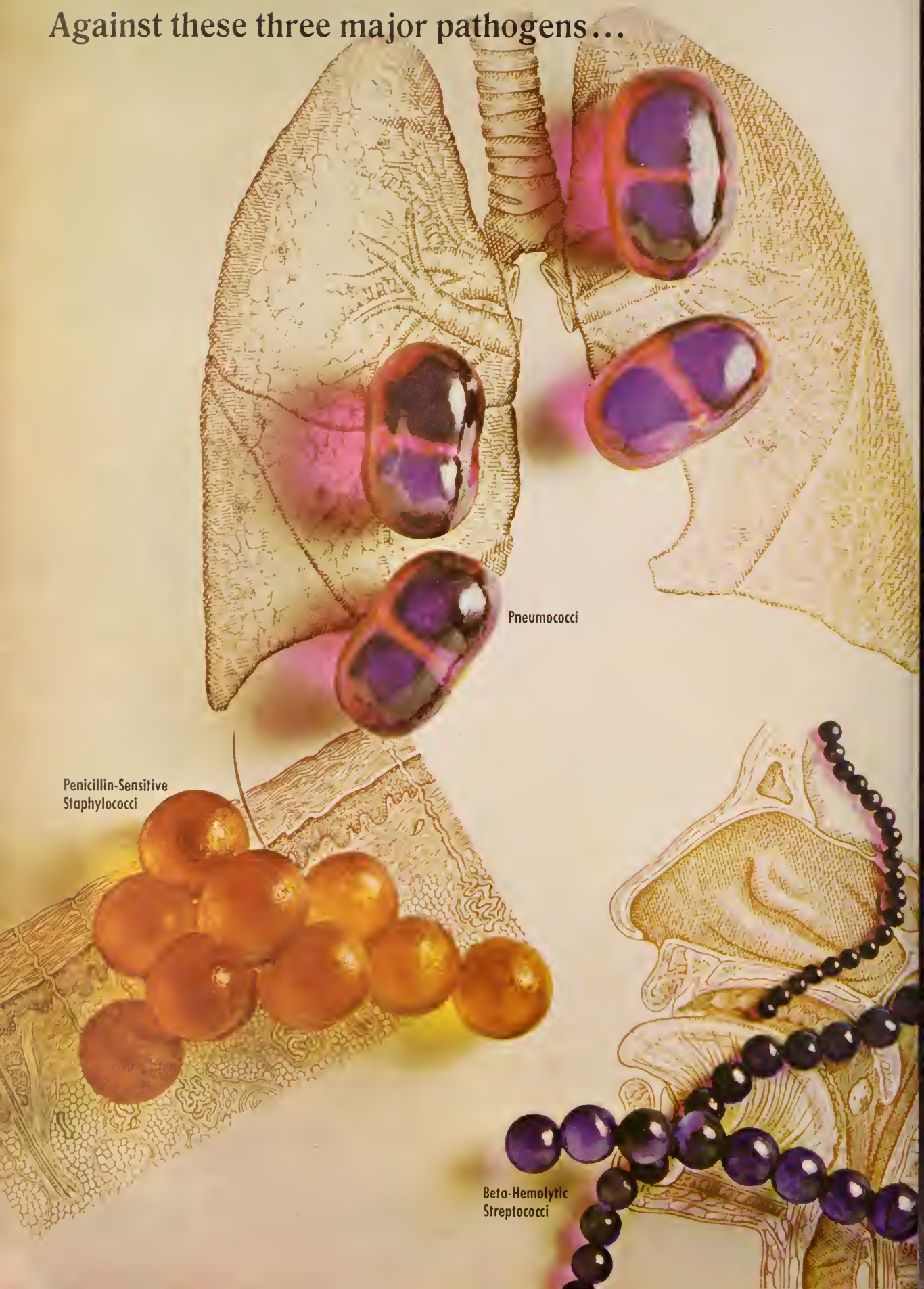
ne Ambar Extentab before breakfast can lp control most patients' appetite for up 12 hours. Methamphetamine, the appe- e suppressant, gently elevates mood and lps overcome dieting frustrations. Pheno- rbital, the sedative in Ambar, controls irritability and xiety... helps maintain a state of mental calm and equa- mity. Both work together to ease the tensions that erode e willpower during periods of dieting.

so available: Ambar #1 Extentabs®—methamphetamine drochloride 10 mg., phenobarbital 64.8 mg. (1 gr.) (Warn- : may be habit forming).

BRIEF SUMMARY/**Indications:** Ambar suppresses appetite and helps offset emotional reactions to dieting. **Contraindications:** Hypersensitivity to barbiturates or sympathomimetics; patients with advanced renal or hepatic disease. **Precautions:** Administer with caution in the presence of cardiovascular disease or hypertension. **Side Effects:** Nervousness or excitement occasionally noted, but usually infrequent at recommended dosages. Slight drowsiness has been reported rarely. See package insert for further details.

A. H. ROBINS COMPANY, RICHMOND, VA. 23220 A-H-ROBINS

Against these three major pathogens…



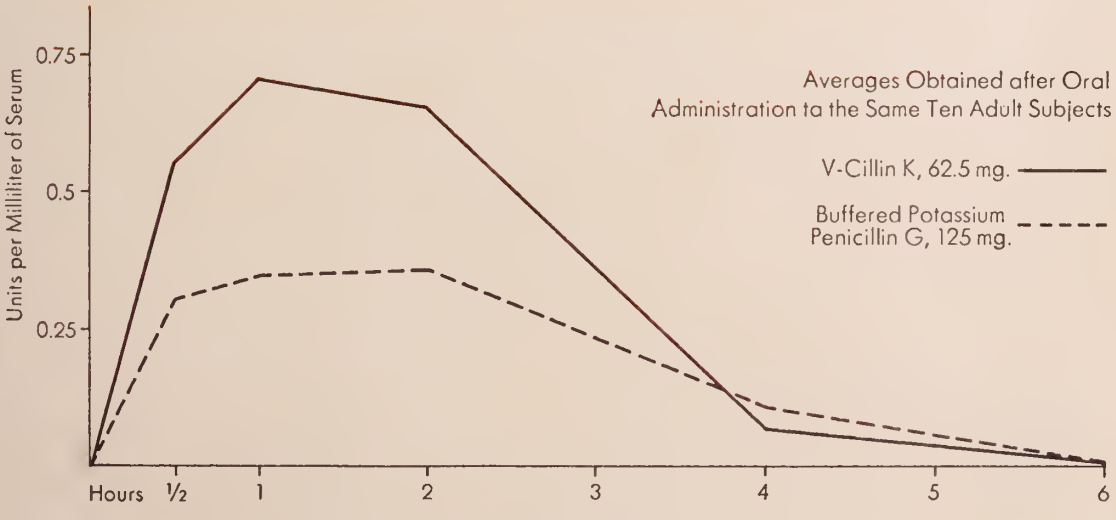
V-Cillin K® provides dependable oral antibacterial activity

because it combines a high degree of in-vitro activity...

Antibiotic	Staph. Aureus (Penicillin-Sensitive) MIC (mcg./ml.) Median	Range	Streptococcus, Group A MIC (mcg./ml.) Median	Range	Diplacaccus Pneumoniae MIC (mcg./ml.) Median	Range
Penicillin V	0.02	0.02-0.04	0.02	0.003-0.4	0.01	0.005-0.2
Penicillin G	0.02	0.005-1.6	0.005	0.002-0.2	0.02	0.01-0.1
Methicillin	1.6	0.4-6.3	0.2	0.1-0.4	0.2	0.1-1.6
Oxacillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Claxacillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

Adapted from Klein, J. O., and Finland, M.. New England J. Med ,269:1019, 1963.

with high blood levels, even in the presence of food



Adapted from Griffith, R. S., and Black, H. R.: Current Ther. Res., 6 253, 1964.

V-Cillin K® Lilly 700636

Potassium Phenoxymethyl Penicillin

(See next page for prescribing informatic

New 500 mg. tablets...a more convenient way to give high doses



Description: V-Cillin K is the potassium salt of V-Cillin® (phenoxymethyl penicillin, Lilly). This chemically improved form combines acid stability with immediate solubility and rapid absorption. Higher serum levels are obtained more rapidly with this penicillin than with equal oral doses of penicillin G. The higher serum levels and acid stability of V-Cillin K make it a more dependable penicillin for oral use.

V-Cillin K, Pediatric, is an oral solution of clinically proved V-Cillin K in teaspoon dosage form. When mixed as directed, each 5 cc. (approximately one teaspoonful) will contain 125 mg. (200,000 units) phenoxymethyl penicillin as the potassium salt.

Indications: V-Cillin K has been shown to be effective in the treatment of streptococcus, pneumococcus, and gonococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy and tooth extraction in those patients with a history of rheumatic fever or congenital heart disease.

Contraindication: V-Cillin K should not be administered to a patient with a history of penicillin hypersensitivity.

Warnings: In rare instances, the use of penicillin may cause acute anaphylaxis which may prove fatal unless promptly controlled. This type of reaction appears more frequently in patients with a history of sensitivity reactions to penicillin and in those with bronchial asthma or other allergies. Resuscitative drugs should be readily available for emergency administration. These include epinephrine and pressor drugs (as well as oxygen for inhalation) for relief of immediate allergic manifestations and antihistamines and corticosteroids for delayed effects.

Precautions: V-Cillin K should be used cautiously, if at all, in a patient with a strongly positive history of allergy.

In prolonged therapy with penicillin, and particularly with h parenteral dosage schedules, frequent evaluation of the renal hematopoietic systems is recommended.

In suspected staphylococcus infections, proper laboratory stu (including sensitivity tests) should be performed.

The use of penicillin may be associated with the overgrowth pencillin-insensitive organisms. In such cases, its administration sh be discontinued, and appropriate measures should be taken.

Adverse Reactions: Although serious allergic reactions are much common with administration of oral penicillin than with intramusc forms, manifestations of penicillin allergy may occur.

Penicillin is a substance of low toxicity, but it does possess a sig cant index of sensitization. The following hypersensitivity react associated with the use of penicillin have been reported: skin ra ranging from maculopapular eruptions to exfoliative dermatitis; caria; and reactions resembling serum sickness, including chills, fe edema, arthralgia, and prostration. Severe and often fatal anaphyl has occurred (see Warnings). Hemolytic anemia, leukopenia, thr bocytopenia, and nephropathy are rarely observed side-effects are usually associated with high parenteral dosage.

Administration and Dosage: For Tablets V-Cillin K and for V-Cilli Pediatric, the usual dosage ranges from 125 mg. (200,000 units) t times a day to 500 mg. (800,000 units) every four hours. For info the daily dosage may be 50 mg. per Kg. of body weight divided three doses.

Beta-hemolytic streptococcus infections without associated b teremia may be treated with 200,000 to 400,0000 units three tim day. Therapy should be continued for a minimum of ten days to pre development of rheumatic fever and/or other serious complicati Dosage for routine streptococcus prophylaxis in patients with a his of rheumatic fever or congenital heart disease may be 200,000 u once or twice daily. When such patients undergo tonsillectomy, t extraction, or other minor surgery, the prophylactic dose should 500,000 units every six hours given two days prior to surgery and two days postoperatively. If oral medication is not feasible on the of surgery, parenteral therapy should be considered. Mild to mo ately severe pneumococcus pneumonia has been treated effecti with 250 mg. every six hours.

In staphylococcus infections, 400,000 units or more should be gi every six to eight hours in conjunction with indicated surgical pr dures.

For gonorrhea in males, 500 mg. (800,000 units) every four hours three doses may be employed; in females, 500 mg. every four h for six doses are recommended. Refractory infections generally resp to a second treatment three to four days following completion of first. Treatment of gonorrhea with severe complications should individualized, with prolonged and intensive treatment. Patients wi suspected lesion of syphilis should have a dark-field examination fore receiving penicillin and monthly serologic tests for a minimum three months.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units) bottles of 50 and 100; and 250 mg. (400,0000 units) and 500 (800,000 units), in bottles of 24 and 100.

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,000 units) 5 cc. of solution, in 40, 80, and 150-cc.-size packages. [032

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

On Its 25th Anniversary
Medical-Surgical Plan of New Jersey
Salutes
Blue Shield Participating Doctors

On July 1, 1942, Medical-Surgical Plan of New Jersey officially became a going concern, the result of over four years of fact finding, planning and organization by The Medical Society of New Jersey—including the drafting of enabling legislation—and financed by a $5,000 grant for the Society.

Between February and July of 1942, nearly 1,000 individual doctors had affirmed their belief in the new Plan by signing participation agreements committing themselves to accepting the Plan's payment as payment in full for eligible services rendered to qualified members.

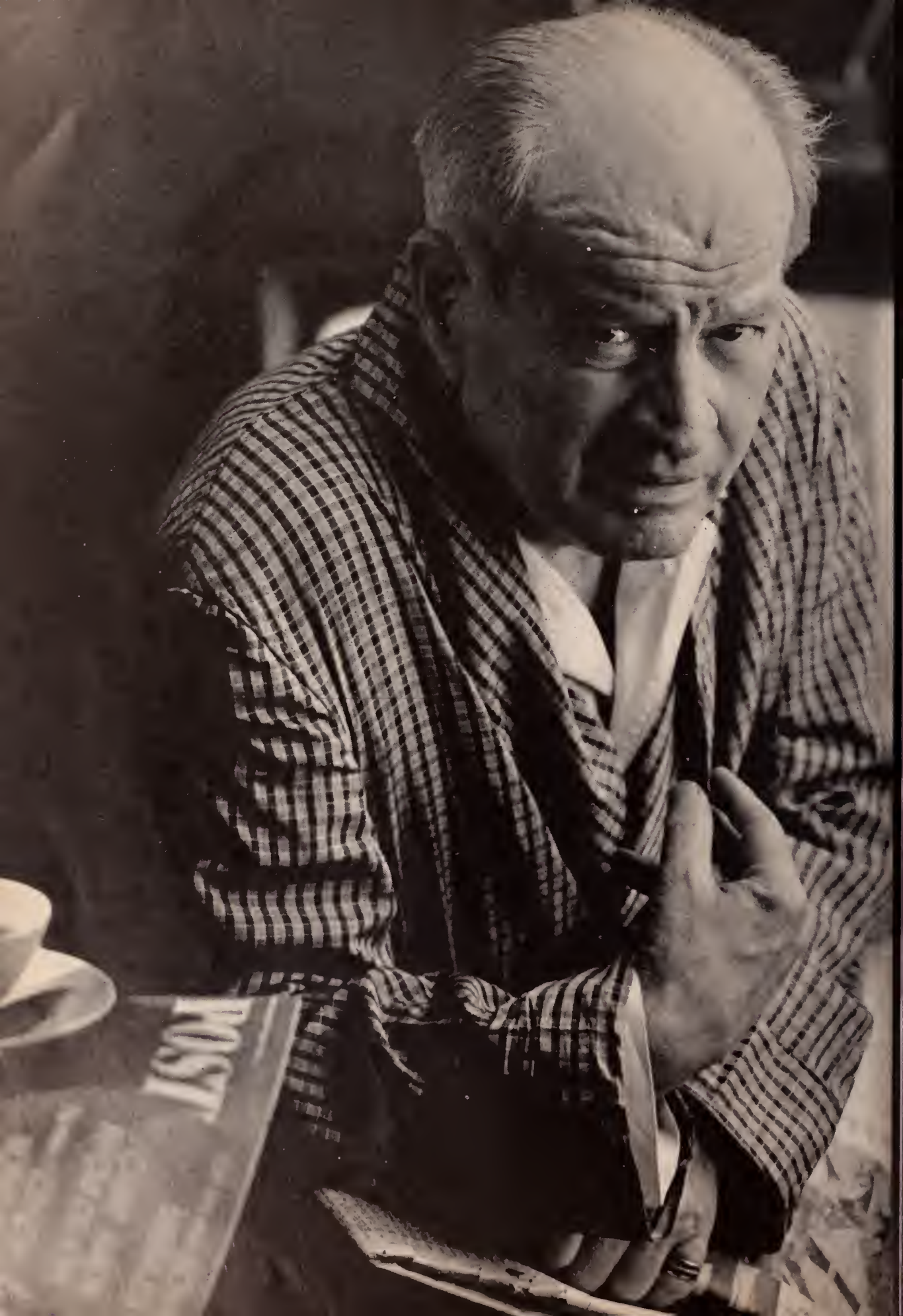
Over the years, this support of Blue Shield's unique Service Benefits concept by Participating Doctors has been responsible for phenomenal acceptance of, and growth by, the Plan. Throughout its first quarter century of service, Medical-Surgical Plan's membership has risen from 4,131 in 1942 to nearly 2.8 million persons, and annual benefits paid on behalf of members have increased from $5,000 to over $53 million. During its first 25 years Medical-Surgical Plan helped members with their medical-surgical expenses to the total extent of $450 million.

Today over 7,000 Doctors of Medicine, Doctors of Osteopathy, Doctors of Podiatry, Doctors of Dental Surgery and Directors of Bio-analytical Laboratories participate with Medical-Surgical Plan to fulfill Blue Shield pledge:

"TO MAKE AVAILABLE. . .ADEQUATE PERSONAL AND SYMPATHETIC MEDICAL CARE, PREVENTIVE AND CURATIVE, AT THE LOWEST COST COMPATIBLE WITH EFFICIENT SERVICE."

To them, on behalf of its subscribers, the Plan expresses its deepest appreciation, together with the firm assurance that it will continue to do its utmost to serve efficiently as the chosen prepayment mechanism of the professions.

BLUE SHIELD®
MEDICAL-SURGICAL PLAN
OF NEW JERSEY
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Posed by professional model

I'm supposed to get up and do things?

With my heart?

It's entirely natural—and may even be desirable—for the cardiovascular patient to be somewhat anxious about himself.

But when anxiety leads to unreasonable self-imposed limitations and restrictions . . . when it aggravates cardiovascular symptoms . . . when it interferes with restful sleep, measures to help alleviate the anxiety are probably in order.

One measure, of course, is reassurance. Another, adjunctive measure, is EQUANIL (meprobamate).

Over a decade of experience has shown that EQUANIL (meprobamate) is generally well tolerated as well as effective. Side effects are usually limited to transient drowsiness; serious, therapy-interrupting side effects are rare.

Cautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use may result in dependence or habituation in susceptible persons—as ex-addicts, alcoholics, severe psychoneurotics. After prolonged high dosage, drug should be withdrawn gradually to avoid possibly severe withdrawal reactions including epileptiform seizures. Side effects include drowsiness and, rarely, allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute non-thrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. Meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Warn patients of possible reduced alcohol tolerance. Should drowsiness, ataxia, or visual disturbances occur, dose should be reduced. If symptoms persist, patients should not operate vehicles or dangerous machinery. A few cases of leukopenia, usually transient, have been reported following prolonged dosage. Other blood dyscrasias—aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia—have occurred rarely, almost always in the presence of known toxic agents. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. Prescribe very cautiously for patients with suicidal tendencies. Suicidal attempts should be treated with immediate gastric lavage and appropriate supportive therapy.

Contraindications: History of sensitivity to meprobamate.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

American Hospital Formulary Service Category No. 28:16.08

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Wyeth Laboratories Philadelphia, Pa.

to help relieve anxiety and tension occurring alone or secondary to organic disease

Equanil® (meprobamate)

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EDITORIALS

Meet Lou Collins



Our Society was founded in 1766. And in that year, one Richard Collins came to the colonies straight from Ireland. He settled in the quaintly-named village of Port Republic, which was then in Gloucester County. A century later somebody whetted a carving knife and cut Atlantic County out of the eastern end and Camden County out of the northern edge of Gloucester. Port Republic then found itself in Atlantic County. But when Richard Collins practiced in Port Republic, he was a Gloucester County resident, and proud of it. Indeed, he was the first physician in Gloucester County (or even in Atlantic County for that matter).

The Collins' line continued unbroken and now one of his descendants — Louis Keeler Collins — is President of The Medical Society of New Jersey. Lou was born in 1911 and received his B.S. at Penn State in 1931, one of the youngest in that class. His M.D. comes from Jefferson — 1934. After finishing at Jeff, he won one of the coveted Jefferson Hospital internships. Right after that he found himself in Hong Kong studying tropical medicine in anticipation of practice in New Jersey's south.

He then had a tour of duty as a ship's surgeon —though this ship was only a 70-foot private schooner. He spent that year sailing the South Seas, and he was never, never sick at sea. Later adventures included service as a flight surgeon for the Army Air Corps (they call it the Air Force now, but it was part of the Army when Lou was in it). He was in the China-Burma-India theatre, flew the "hump" and picked up some medals (Purple Heart, Air Medal, and Distinguished Flying Cross). The biographer makes no mention of a good conduct medal. He worked with the wounded in one of the famous air evacuation squadrons in that theatre.

But with all that—Burma, Hong Kong, China, and the South Seas, he still loves Gloucester County. He is an attending physician at the Elmer Hospital; he taught at his medical alma mater for twenty years; and he was one of the founders of the American Academy of General Practice. He served the Gloucester County Medical Society in many capacities, including an exciting year as its president.

Lou is married to the former Emmy Koch of Philadelphia. They have two children — Aleta Burley who is in Long Branch, and Emmy Lou Winter who is way out in Seattle.

Lou is a general practitioner, and the kind of GP who makes us all realize that as long as there are doctors like him around, you need not sing any requiems for general practice.

We start our third century in good hands.

Olive Zuckerman



Olive Zuckerman who heads up our Woman's Auxiliary for 1967-68 is a New Jersey girl from way back. Well, it really wasn't that long ago. But Mrs. Zuckerman was born in Paterson, attended the Connecticut College for Women, and received her nursing degree from St. Joseph's Hospital in Paterson. In 1942 she married David E. Zuckerman, a well-known Passaic County gynecologist and obstetrician. (Sorry, but we can't say any more about *him*. In these notes, the husband is not in the center of attention.) A year after becoming Mrs. Zuckerman she joined the Woman's Auxiliary to the Passaic County Medical Society, serving in almost all offices there. Mrs. Zuckerman became president of that auxiliary in 1959. Her service to the State Auxiliary Board began in 1955 as public relations chairman, and has continued with chairmanships of AMA-ERF, community service, civil defense, press and publicity, and others too numerous to list.

She has been active in community service, taking part in all major fund drives. Her activities include PTA vice-presidency, secretary of the Passaic County Heart Association, vice-president of N.C.J.W., vice-president and director of the Visiting Homemaker Service, member of the Passaic County Grand Jurors Association, St. Joseph's Hospital Auxiliary, and the New Jersey Nurses' Association.

She has three children — Leslie, a student at Rutgers University Medical School; Donald, a 1967 graduate of the University of Pennsylvania, who is entering law school; and a daughter, Robin, a senior in high school.

Her leisure activities — when she has any leisure — are reading, bridge, and golf . . . but not necessarily in that order.

The Bright Side Of Our Image

In the past eight years nearly 125,000 of Europe's best educated young people have in one way or another sought admittance into the United States. This includes physicians in search of high-quality advanced education and the right to work unfettered by unacceptable restrictions. Not finding it in their home-lands, they turned to the United States. Only a fraction of the 15,000 hopeful young doctors seeking entry each year ever arrive here. Figures of the Association of American Medical Colleges show that of those who take the Educational Council for Foreign Medical Graduates examination, only about one-fifth are accepted. This means that about 4,000 are arriving from Europe annually to work and study in medical schools and hospitals. And a large number of these are staying to practice medicine. To Europe, this loss has helped create what for those countries is a major problem—the "brain drain."

Medicine is not the only branch of science involved in the "brain drain." Europe is also losing engineers, chemists, physicists—in fact scientists and technicians in all areas—to the United States. But the major exodus seems to be among the medically oriented. The implications of the flight of its young scientifically educated has European leaders frankly worried. There is concern that the continent has become undeveloped scientifically and technologically in comparison with the United States. What's more, the gap is growing.

Russians permit no emigration: they feel that because of the absence of scientific give-and-take in Europe generally, their own scientific programs are suffering. Premier Kosygin, in fact, has proposed a "technologic alliance" between Russia and Western Europe in order to end what he thought was "the dependence of Europe on advances made in the United States."

Even more worried about the "brain drain" is Great Britain. The emigration of its young physicians has threatened Britain's National Health Service with collapse. They complain that about one-third of Britain's medical graduates are leaving the country each year. What's more, the number of medical students going into training has been falling steadily.

An eminent barrister, R. H. Davison, told the British Medical Journal that: "Not only has the NHS provided outrageous terms and conditions of service, it has completely failed to inspire respect among the younger members of the profession who see through its Fabian humbug." He noted that even the supply of doctors being imported from Pakistan and India to help fill the vacuum of British doctors was dwindling, and criticized the government suggestion that, "the advent of the Common Market will permit us to import Italian doctors to run our Health Service."

"Clearly, said this Britisher, "fourteen years of socialism have made us completely shameless, for no one can believe these policies to be in the national interest."

That was five years ago. Since then the tempo of emigration from Britain has accelerated despite government efforts. One emigrating doctor put it this way: "We're not exactly forced into servitude by the government; but we're not exactly free to practice our profession either. You in America still have a choice. But what would happen if that choice were removed, as it has been in Europe Where would American doctors emigrate to?"

What has caused the drain of European brains? Partly it is money. British interns say they work an average of 100 hours a week for less than $200 a month. That figures out to about 45 cents an hour. But the greater issue clearly is one of "scientific climate." Over-regulated conditions have served to stymie scientific inquiry; without scientific inquiry there is lack of stimulation, and without stimulation scientific advancement suffers. So goes the analysis of what's wrong with science in Europe.

This, of course, is an oversimplification. But the fact is that the young, scientifically-oriented have shown by their desire to vacate Europe that something about the scientific climate there is inadequate, if not stifling. And whatever it is, the medical school graduates of Europe have turned to the United States to get into the mainstream of medical science.

American medicine became a lure to European doctors following World War II, when it became clear that the United States had emerged in the forefront of medicine. Obviously the United States has continued to better its standing. If this were not so the brains of Europe wouldn't be seeking entry. For they crave scientific excellence along with freedom to practice their profession.

In the 21 years since World War II, 23 Americans have been awarded the Nobel Prize in medicine and physiology. That's more than were won by physicians and scientists from all of the other countries of the world combined. In the same period, well over half of all the major new drug discoveries were developed

in this country. As a matter of fact, 80 per cent of the prescriptions written today could not have been written ten years ago because the drugs didn't exist.

But medical progress cannot be measured only in the laboratory. It must also be measured in terms of people, disease, and facilities. Thus, the fact that America was building 750 hospitals in the same time that England was building one also enters the picture.

So do such matters as the rate of death from various diseases. The death rate from cancer in America, for example, is well below the rate of Western Europe. This reflects better medical treatment. The same holds true for other treatable diseases, including tuberculosis, pneumonia, strokes, and influenza. All of these kill fewer people here, per capita, than in Western Europe. What it all adds up to is this: four and a half million Americans alive today would be dead, if medicine were practiced with the same amount of knowledge and the same tools as it was just 25 years ago. In that time span—in the past 25 years—medicine has learned more than it learned in the previous 50 centuries.

No one can assign a nationality to such knowledge. It is world wide. But when it comes to teaching and applying that knowledge, the rest of the medical world looks to the United States for leadership.

F. Clyde Bowers 1908-1967

Dr. F. Clyde Bowers, the 167th President of The Medical Society of New Jersey, died on April 22, 1967. Dr. Bowers had an extraordinary career of service to his community and to us in this medical society. He plunged himself into civic activities at an early age, and was, indeed, Mayor of Mendham from 1947 to 1951. As early as 1937, he was a delegate from the Morris County Medical Society to the House of Delegates. In 1942 he became president of the Morris County Medical Society and, in an unusual gesture, the members of that society twice re-elected him as president. He became chairman of the old Welfare Committee of our Society, later of our Council on Public Relations. In 1955 he served as a Judicial Counselor. He then became chairman of our Committee on Medical Practice. In 1956 he was elected second vice-president, of The Medical Society of New Jersey and moved through the presidential chairs, assuming office as President in 1959.

He was Chairman of his borough's Planning Board. He was a founder of the Mendham Youth Center. He involved himself in planning for his borough's little League baseball team. He was a school physician. He was active in the Boy Scout movement. And for the past seven years he has been a member of our State Board of Medical Examiners. On September 26, 1962, Governor Hughes spoke at a testimonial dinner given by his fellow-citizens in Morris County, and characterized him as one who had unselfishly and with deep dedication served not only his own patients, not only his medical society, but his entire community.

The Medical Society of New Jersey has, in the last four months, lost three members of its State Board of Medical Examiners (Doctors Featherston, Butler, and Bowers), two ex-presidents (Dr. Butler and Dr. Bowers) and several members who had made distinguished contributions to our work — like Dr. Sica. It has been a bad year.

Dr. Bowers' career — all too brief — is a real example of how one can be a good medical practitioner, an indefatigable worker in medical society activities and, most important of all, a valuable and useful citizen to his entire community. We speak of the importance of the individual physician in establishing good public relations, in maintaining an attractive "image" before the community. If we ever needed a model of what this means in action, Clyde Bowers provided that model.

ORIGINAL ARTICLES

Our new President here offers a blueprint for constructive action in the year ahead.

Time For Statesmanship*

Louis K. Collins, M.D./Glassboro

Forty-two years ago, as a boy who used to play high school baseball on the Atlantic City beach, in common with my playmates I found our routine disrupted and ourselves dispossessed from our play area because of the demands of "The President." This was a new hotel upon which construction was beginning. Once again in Atlantic City I find my life about to be affected by presidential demands. This time, wholeheartedly I accept the change. With grateful heart and dedicated spirit I enter upon the construction of a new president and a new presidential year, honored by your manifest trust in me and determined to serve you and our people to the best of my ability, as the 175th President of this historic and distinguished Society.

I do not intend to list specific goals for the coming year. Rather, I feel that we should intensify our efforts along the lines that we have followed in the past twelve months. Most of our excellent committees will continue actively to function; some new ones will undoubtedly have to be appointed, as part of our adaptation to changing times and expanding involvements.

In 1945, when the Air Force finally decided it could get along without my services, I thought of becoming a flight surgeon for one of the commercial air lines. The threat of socialized medicine was so apparent to me even at that time, that I felt it might be better to be salaried with an air line than to work full time for "Uncle Sugar." My good wife raised a "mild" objection, stating that she had bounced around the United States of America with two small daughters for two years, and wanted to go home. You know Emmy. We returned to the old stand in Glassboro. Had we not done so, you very probably would have been spared this dissertation by me today.

Twenty-two years later, we are well on the way to the realization of the social planners' dream of Government Medicine. Medicare has been with us for nearly a year. We must continue to work constructively, with both the American Medical Association and the Department of Health, Education, and Welfare, to refine and to improve this program, as we in medicine feel it should be improved.

Title 19 has the potential of becoming even a greater threat than Medicare to medical practice and quality medical care, if we do not assume a position of leadership in formulating the implementing legislation in New Jersey. I intend to encourage the efforts already begun to bring to focus and fulfillment our objectives, even before hearings are called on the proposed bill, which must be operative by 1970. We should exercise forceful statesmanship by pointing out the deficiencies of the legislation enacted in some other states, and by emphasizing the pitfalls of setting too liberal an income ceiling. I am sure that you are aware that HEW may not approve a State's plan unless the suppliers of

* Inaugural address, delivered at the annual meeting in Atlantic City, May 16, 1967, by Dr. Collins on the occasion of his installation as President of The Medical Society of New Jersey.

the services, physicians mainly, agree to cooperate. Thus, it behooves us to insist on free choice of physicians and hospitals, where feasible; customary and usual fees; no interference with the physician's professional judgment in the care of his patient; and all the other important considerations. I think that with continued effort on the part of all, we can develop an acceptable format for the Legislature to study. That body and we must always remember that the taxpayers of New Jersey will pay 50 per cent of the cost of Title 19 directly, and the remainder will be paid through the taxes they pay to the federal government.

Our Society must continue to be active concerning all other governmental projects. I should like to mention two specifically:

1. The Heart, Stroke, Cancer Legislation, Public Law 89-239. We feel that New Jersey as a State will soon receive a planning grant. I am most gratified that Dr. Jehl will continue to serve as Chairman of the New Jersey Joint Committee for implementation of this law.

2. The "Comprehensive Health Planning and Public Health Service Amendments of 1966," Public Law 89-749. Each state has a federal grant under this act, with the State Departments of Health delegated to be in charge. We have already requested a meeting with Dr. Kandle to help plan for the proper utilization of these funds, for the betterment of the health of our New Jersey citizens.

Individually and collectively we should do everything possible to enhance our image with the public Although certain books, magazines, newspapers, and individuals have nothing but criticism for the medical profession, we should not be discouraged from trying to maintain and improve all aspects of our practices. We should especially attempt to deal better with medical emergencies through improved physician, hospital, police, and public cooperation and understanding.

We are still laboring hard for a law in New Jersey to protect our medical and x-ray technicians. Our Society is likewise actively supporting the proposed statewide Medical Examiners' System.

We intend to cooperate with our two New Jersey Medical Schools, so that we may assist the schools in planning and so that they may help us practitioners, especially in the field of continuing education. This is very evident in the Heart, Stroke, Cancer Law which I have already mentioned. I also intend to appoint a learned committee from South Jersey to work with the State Legislature, which has evinced great interest in planning a third medical school below the Rancocas. Because of New Jersey's position as an outstanding producer of numerous medical students, our youth are having more and more difficulty in being accepted at out-of-state medical schools. This can be partly remedied by stimulating the Rutgers four-year program and by actively working for a third school within the State.

We are actively cooperating with the State Board of Medical Examiners in support of an amendment to the Medical Practice Act to allow foreign doctors of medicine to take their State Board examinations after signifying only *intent* of citizenship, rather than having to wait five years for full citizenship. This will help New Jersey hospitals secure interns and residents. It might increase, too, the supply of physicians in the state.

In the increasingly important field of air and water pollution control, we will strive to stimulate and support our county society committees, by making them more knowledgeable on the subject, and by encouraging all members to participate actively in community discussion and action on pollution controls. Our state committee has done yeoman's work thus far. We expect this committee to function even more effectively in the future.

There is now an inactive committee investigating possible sites for a new Headquarters Building for our Society. My feeling is that this idea should be actively pursued, because

we are certainly having "growing pains" at 315 West State Street. As the work load becomes heavier, as more meetings are scheduled, as more help is needed, as more people attempt to park their cars in our cramped parking area, the greater seems the need for a change.

The Medical Society of New Jersey is as good as its officers, its councils and committees, its staff, its component societies, and lastly, as good or bad as each individual member.

I trust that you and your wives, through their fine auxiliary, will work with us, will encourage us, will listen to us (perhaps not always in agreement with us), and will assist in the work of the Society in whatever way you can. If we all work unitedly together, I am sure that, with God's help, we shall have a fruitful and rewarding year for The Medical Society of New Jersey, and together we shall do all in our power to make the Garden State a pleasant and healthy place in which to work, to play, and to live.

54 State Street

Education On The Safe Use Of Electricity

Each year, about 1,000 Americans are killed by accidental electric shock. To help combat this tragic toll, the U.S. Public Health Service's Injury Control Program has developed an electric shock prevention demonstration to educate the public about the safe use of electricity. Dr. Richard E. Marland, as Chief of the Injury Control Program, has shown that the number of electrical shock accidents is on the increase. A need exists, he said, to expand consumer education programs and for manufacturers to design safer appliances, where necessary.

"To those of us working in this field, it seems that people invariably find new ways to become part of an electric circuit," says Dr. Marland. "For example, a busy housewife, to save time, plugs a hairdryer to an outlet, then attaches the dryer to her head, keeping it in operation while bathing, washing dishes or doing the laundry. Because the human body is grounded under such circumstances, an electrically unsafe appliance could cause injury or death."

The shock prevention demonstration illustrates basic facts about electricity, electrical systems, grounding electric cords, and appliances that are especially applicable to the home environment. "A proper understanding of electricity is essential to the prevention of injuries associated with the misuse of electric current," Dr. Marland emphasized. This exhibit visually demonstrates such things as the flow of current from generator to a nearby transformer, on through service lines into the home, with terminals and wall sockets, which are used during the presentation.

The kit is a mock-up of a house with inside walls facing the audience, and electrical circuits, including wiring outside the structure, are shown and used in the various demonstrations. Kits are available to the Injury Control Program regional offices throughout the country for use before organization and community groups concerned with home accident prevention.

If you are interested in getting a demonstration for your PTA, your service club, or any other appropriate group, write to Injury Control Program, Public Health Service, 800 North Quincy Street, Arlington, Virginia 22203.

In this unusual paper, a distinguished Mayo internist highlights the importance of the surrounding environment in many remitting diseases.

Mesenchymal Dyscrasias And Some Ecologic Observations*

Malcolm M. Hargraves, M.D.
Rochester, Minnesota

The art and science of medical practice have undergone revolutionary changes, and while there have been severe growing pains, there have also been increasing sophistication and maturity, particularly notable in medical science. We have adjusted—usually grudgingly — to the change, but without violent disruption. New problems, as they appeared, have slowly but surely been solved. Although the medical fraternity has always been conservative, it has eventually adopted new concepts, when valid, and has gradually adapted them into its practice of medicine. We have made progress because each of us has felt a responsibility to share observations with our fellow practitioner, whether it be an interesting case or a startling scientific breakthrough. With such rapport, new ideas and observations have become common medical property, have been subjected to critical scrutiny, have been tested under variable conditions, have been remolded by new hands, and then have emerged either as an accepted contribution to medical knowledge or have become lost in the limbo of things that might have been. However, the lag between the time when a valid, constructive observation becomes common medical property and when it becomes common medical knowledge is a major challenge to medical educators.

In 30 years of active practice in a large medical clinic one not only sees a great variety of illnesses, but (contrary to many impressions) one sees many of the same patients year after year. Thus, there is an opportunity to know these patients intimately, and become familiar with the personal history of their work, play, hobbies, projects, and other ways of life. Long ago I began to keep an "interesting case file," and as the years went on, I became more and more absorbed in the circumstances of life of these "interesting case" patients. In time I had accumulated a file of case histories that simulated an ecologic study relating the patient and his disease to his environment. Such studies are, of course, incomplete, but by taking a meticulous history and relating environmental events with the status of disease, I began to see certain patterns of relationships. For years, with successive visits, I have tried to correlate the environmental history with the history of the disease. Lymphomas, leukemias, aplastic anemias, purpuras, and other blood dyscrasias were my early major interests. As time passed, systemic lupus erythematosus, rheumatoid arthritis, nephritis, and other hyperimmune or auto-immune states enticed me.

Although I have exposed a generation of fellowship men and younger staff people to these ideas, I have been reluctant to make a national or international incident of them. However, one may easily become self-hypnotized with an idea and begin to lose his sense of proportion. I went through this after observing and working out the succession of mor-

* This work is from the Mayo Clinic and Mayo Foundation: Section of Medicine. It was read May 16, 1966 at the Annual Meeting of The Medical Society of New Jersey.

phologic changes that occurred in the LE cell phenomenon, and then correlated its presence in a few patients afflicted with clinically acceptable systemic lupus erythematosus. When these observations were published, many others, with their special knowledge, picked up the problem and ultimately demonstrated the immunologic mechanics involved in this phenomenon. It is time that someone else, many "someone elses," pick up this new problem and evaluate it for its true worth.

I refer to these pathologic states as mesenchymal dyscrasias. I have used the term mesenchymal after much deliberation, since tissues derived from the mesenchyme during embryonic development are primarily involved with our inner defense mechanisms. Dysfunction of these defense mechanisms constitutes disease. Tissues or organs involved are the hemopoietic bone marrow, lymph nodes, Peyer's patches, and innumerable isolated collections of lymphocytes throughout the body which can respond to stimulation and proliferate. In addition, there is the spleen, Kupfer's cells of the liver, and the "wandering, resting cells" of the connective tissue as other vital parts of this reticuloendothelial system. There is doubt about the origin of thymocytes, but older books on embryology credit the origin to mesenchymal cells. When the interrelationship of these tissues and organs is considered, one must remember that the adrenal cortex also is derived from the mesenchyme and that some reticuloendothelial elements exist within the pituitary gland.

It seems logical that this array of tissues would have certain common and correlated functions in their activities of phagocytosis and antibody formation in this inner defense of the body. Malfunction of such a system obviously carries serious implications, as our increasing number of auto-immune diseases attests. Such a dysfunction is a dyscrasia, and the term "mesenchymal dyscrasia" is thus justifiable.

As man has evolved over hundreds of thousands of years, his mesenchymal system has had to adapt itself to defend the body against a host of various agents. The great epidemics of the past (such as the black plague, as well as smallpox, syphilis, tuberculosis, typhoid fever, and numerous diseases caused by invasive microorganisms) have eliminated great hosts of our forebears during this evolutionary ascent. The mesenchymal systems of these victims were not adequate to cope with the challenge. So it has come to pass that we are descendents of ancestors who have had great and gross exposure without benefit of specific therapy. With their survival, they have passed on to us a mesenchymal system that, in the past, had obviously met all challenges. Today, thanks to sanitation, vaccination, immune sera, bacteriostatics, and antibiotic agents of great specificity, as well as better nutrition, better housing, and better working conditions, our mesenchymal system has few of the challenges that beset our ancestors. In other words, ecologic relationships have progressively changed, notably so in the last half century.

Today, we are living through a tremendous technologic revolution. Products of this revolution present challenges to our mesenchymal system that were never experienced by our ancestors. Our exploitation of fossil fuels with a host of exotic utilitarian chemicals produced by a petrochemical industry of escalating proportions is responsible for a subtle but enormous environmental change which few fully appreciate. Each of these new chemical agents must be viewed with a suspicious eye, just as every new medicament is scrutinized until a long clinical trial has proved its safety. After adequate animal testing and extensive clinical trials have indicated the safety of a new medicament, almost invariably there appears, sooner or later a patient taking such medication who experiences a serious, if not fatal, reaction to the drug. This adverse reaction often involves the mesenchymal system and may induce various manifestations or pathologic entities.

My array of interesting cases is suggestive that the same happens with exposure to many of our petrochemical products. Such agents in-

clude commercial, industrial, and household solvents; paint and varnish removers; paint solvents or vehicles that carry paint pigments; high-octane, diesel, and heating fuels with their various additives for clean burning and proper combustion; dry cleaning agents; chlorinated hydrocarbons, including some of the insecticides and herbicides, as well as the asphalts, tars, creosote, and other products. These agents are termed "commercial grades" and are mixtures of multiple molecular structures, not a single purified reagent. To compound this problem still further, many of these commercial products are deliberate mixtures of many hydrocarbons, each contributing its part for best total performance of the product. These are reactive chemicals. They primarily enter the body by inhalation. One can well imagine that many of these molecular structures will fit nicely into some combination of body cell protein structure, perhaps making themselves a permanent part of the cellular composition and altering physiologic function or recognizability or both by the antibody-forming cells of the mesenchymal tissues. After all, these molecules *are* the molecules of our far-distant ancestors, or related organisms of millions of years ago, who, by their transformation, released the hydrocarbon molecules that are the fossil fuels from which we get our petrochemical products.

These new commercial petrochemical products, with their hydrocarbon content, have become such a commonplace part of our present environment that we forget that some people may adversely react to them. We have indeed upset our ecologic relationships by a progressive and seemingly irreversible alteration of the biosphere. The ecologic milieu occupied by most of us is undergoing repeated change; and for some, their ecologic niche has become untenable.

Let me now present two illustrative case reports, emphasizing details of the patient's history and its relationship to signs and symptoms.

Case One

A 41-year-old woman was admitted with weakness, rheumatoid arthritis, general pruritus, bleeding gums, hemorrhagic bullae of the lips and mouth, as well as numbness and pain in the left forearm and right leg. She gave an interesting history of sun sensitivity that occurred as a child when she was taken to her grandfather's Arkansas farm in the summer. (The patient was a Negro) The first day of exposure to the sun would make her ill, but each day thereafter the sunshine would bother her less and soon she could tolerate the sun without seeming difficulty. As a teenager, she experienced intermittent, painless swelling of the knees but could remember no other details.

When she was 23 years old, the patient and a friend established their own small restaurant. The patient cooked on an old leaky gas stove, being exposed to the gas during many hours of work. After 8 months of this exposure, she began to tire easily and had what must have been an acute hemolytic anemia characterized by yellow sclerae, dark urine, and severe anemia. She was quite ill for six weeks or more. When the patient recovered, her restaurant with its leaky gas stove was gone.

For the next 3 years she worked as a cook in a tavern. As a food handler, she had had medical examinations regularly and never had had a positive reaction to the serologic test for syphilis.

This patient was a very resourceful woman who painted and redecorated her apartment and bought used furniture which she refinished. Also during this period, the tavern was frequently remodeled and redecorated. When she was 26 years old, the tavern was being painted, and the patient again became acutely ill with high fever, night sweats, painful swollen joints that were red and warm, and much generalized stiffness. The joints involved included the phalangeal-interphalangeal joints of the third fingers of both hands, the wrists, and the feet.

During the following year she lived with an aunt. She did not work, but continued to have fever and shifting joint pains. It is possible that as her condition improved, she again took up her paint brushes, but she was not sure. At any rate, a second severe attack of painful knees, elbows, shoulders, and ankles occurred, and she had to be hospitalized. Gold therapy was tried without relief. After this, corticosteroid treatment was started and (as was done in those early days) the patient was treated symptomatically with whatever dosage would control her distress.

She had married at the age of 28. Because of her arthritic knees she had to be carried into the courthouse to get the marriage license. The premarital blood tests were negative. After marriage, she moved into a newly painted apartment which, she said, "smelled as bad of paint as if I was painting it myself." The first week there, she developed bronchopneumonia. It should be pointed out that, in the susceptible individual, this is a common complication of exposure to paint and other hydrocarbons and represents either a chemical pneumonitis or more rarely a pulmonary purpura. Corticosteroids were used symptomatically for the next year, and she was able to carry on with her new domestic life.

Two years after the marriage, she again probably suffered an acute hemolytic episode. This was marked with fatigue and severe anemia that required six blood transfusions as well as increased amounts of corticosteroids. The patient's condition was eventually stabilized by the use of two tablets of corticosteroids a day. With this dosage, she could lead a fairly normal life.

Throughout this time the patient continued her housekeeping, frequently painting and redecorating. Accord-

ing to her statement "every spring I would clean house and paint, and every time I would paint I would just get through in time to go to the hospital again for more treatment." After her preliminary examination, it became routine for her corticosteroid dosage to be increased. When her condition was again stabilized and she was free of pain, she would be dismissed from the hospital and return to taking her standard two tablets a day.

At the age of 32, she was hospitalized for a miscarriage. At this time serologic tests were abnormal; her husband's serologic results, however, were normal. She received a course of penicillin then and thereafter with each of her yearly hospitalizations, although hindsight would indicate that these certainly must have been "biologically false-positive."

Three years later, she fractured her arm in the winter, and did not paint or decorate; she did not become ill that spring. The following fall, she and her husband moved into her sister's home where the patient did the housework and cared for the children while her sister was at work. This was a five-room house with a faulty, oil-burning space heater that had the fuel reservoir built onto the back of the stove. The patient continually complained about oil fumes in the house, but the rest of the family didn't seem to mind. This type of space heater is common in our midwestern farm houses. Because of inadequate combustion as well as a down-draft chimney valve, oil fumes contaminate the living quarters much of the wintertime. I consider these heating units to be an important part of the hazardous environment of many of my patients. The patient remained at her sister's home until Christmas when her disability forced her to enter the hospital for renewed treatment.

Interestingly, this patient miscarried on three of these hospitalizations and each time there was a flare-up of her arthritis and anemia.

During the spring of her fortieth year, she did a little painting in one room and, although she had a moderate flare-up of her arthritis, she did not require hospitalization.

A climactic series of events arranged in temporal sequence followed.

On Nov. 21 and 22 of that year, she painted her three-room apartment with Latex® paint. At the same time, a professional exterminator was engaged by the apartment-house owner to spray the apartments, halls, and baths. Nov. 28, the patient and other members of the family drove all day and into the night to attend her mother's funeral. A long trip with continuous driving on main highways subjects patients of this type to inhalation of a considerable quantity of motor-vehicle exhaust fumes with their hydrocarbon content. On Dec. 1, the patient's arthritic joints became red and painful, although she had been taking her regular daily dose of corticosteroids. Later that same night severe progressive pain, which was soon accompanied by numbness, developed in her left arm. As a result, she increased her intake of corticosteroids by two more tablets per day. On Dec. 2, the patient called her previous family doctor (who had not seen her for years). He advised her to discontinue the use of the corticosteroid and prescribed some anodyne pills. Her general condition progressively deteriorated; she was hospitalized on Dec. 12 and required hypodermic injections for her pain. Pain and numbness of the lateral aspect of the right leg and foot were now developing, and she had constant nausea with occasional vomiting. On Dec. 18 she was found to be diabetic, and insulin was required for the next 9 days. This raises the interesting question as to whether, without previous insulin treatment, insulin antibodies had developed as an addition to any other abnormal immune phenomena.

On Dec. 20 penicillin was given intramuscularly. This was continued daily until a generalized dermatitis developed 4 days later. This ushered in a new hyperimmune episode of thrombocytopenia, and on Jan. 2 bleeding from the gums appeared along with hemorrhagic bullae of the lips and mouth. This was followed by progressive weakness, anorexia, melena, and increased joint pains. The mononeuritis multiplex of the left arm and right foot and leg continued to be distressingly painful. Notably, no corticosteroids had been taken during that month.

When this patient was seen on Jan. 4, the positive physical findings were: generalized pruritus, with excoriations and purpura of the trunk and extremities, especially noted along scratch marks; purpuric blisters in the mouth and on the lips; pale mucous membranes and conjunctivae; rheumatoid arthritis involving many joints that were warm and painful with marked limitation of motion, especially both wrists, the right middle finger, and the right knee; hyperesthesia of the left fifth and lateral half of the fourth finger with muscle weakness; muscle wasting, particularly about the hands, wrists, elbows, knees, and ankles.

Laboratory studies revealed: hemoglobin value 10.4 Grams; erythrocytes 3,200,000 per cubic millimeter; reticulocytes 8.8 per cent; leukocytes 3,400 per cubic millimeter; platelets 44,000 per cubic millimeter; and bleeding time 18 minutes. In addition, tests for syphilis (the Venereal Disease Research Laboratories, Kahn, Kolner, and Hinton) were all strongly positive; serum electrophoresis showed hypoalbuminemia and a gamma-globulin value of 1.64 Grams; coagulation studies revealed a circulating anticoagulant with thrombopathy; results of the LE clot test were negative on three occasions; liver function test showed 24 per cent sulfobromophthalein-dye retention in one hour; blood sugar was 59 mg per 100 milliliters; stools were positive for blood; a flocculation test for rheumatoid factor was positive; and roentgenograms of the wrists and hands revealed "rheumatoid arthritis."

On Jan. 15, therapy with prednisone was begun, 15 milligrams every 6 hours. Symptomatic improvement was prompt, and the bleeding time (which had been elevated), dropped to 5 minutes within 48 hours, whereas the fasting blood sugar rose to 170 and required 10 units of insulin daily. Sensation began to return to the patient's right leg and foot, and her left hand was subjectively much better. When she left the hospital on Feb. 7, the arthritis was symptomatically well suppressed and the mononeuritis multiplex was remarkably improved. When dismissed, she was receiving 5 mg of prednisone every 6 hours and 16 units of lente insulin daily. The hemoglobin value, however, was 9.7, blood platelets 35,000 per cubic millimeter, reticulocytes 6 per cent, and the bleeding time was 4 minutes.

In the time-related episodes involved in this patient's history, there seems to be very good correlation between her exposure to hydrocarbon and the recrudescence of her disease. The final, rather massive exposure, including several days of painting, exposure to insecticides, and exposure to traffic fumes brought on a multisystem disease state and reactivation of her rheumatoid arthritis, anemia, thrombocytopenia, mononeuritis multiplex, and hepatic dysfunction. Also, a new sensitivity — that to penicillin — appeared. This might be considered an etiologic agent for the purpura

which became evident after the penicillin reaction. Time and circumstances prevented a more complete evaluation of many facets of the pathophysiologic complex presented.

Case Two

This 52-year-old woman had worked for 10 months in 1952 on a factory assembly line that was close to the paint-spray booth. At the time, she noted that the solvent fumes were very strong. During the next nine years, she did custodial work in the offices of the plant. On the domestic side, she and her husband had built their own home, and during the years had done their own painting and decorating as required.

In April 1962 she repainted the kitchen, including the inside of the cupboards. After the kitchen was finished, she started to paint the cement block walls and the floor of the basement. However, before she had completed this, she noted progressive fatigue as well as night sweats, mild dyspnea, chills, and fever. On June 14, she consulted her doctor and was hospitalized for observation. Except for "abnormal blood counts," there were no positive findings reported after a rather extensive examination.

She was treated with antibiotics while in the hospital, but her febrile course remained unchanged; the fever started about 11:00 a.m. and reached its peak about 9:30 p.m.

After another month of this, she consulted a second doctor who rehospitalized her from Aug. 7 to 26. Positive findings at this time were: sedimentation rate 115 mm in one hour; gamma-globulin value 1.8 Grams, and sulfobromophthalein-dye retention 24 per cent in 45 minutes. Although no definite diagnosis was evident, she was given Panalba® while in the hospital. On the ninth day, edema of the face and a rash developed, both of which disappeared after the use of the drug was discontinued. Her chronic course of low-grade fever and malaise continued throughout the fall until Dec. 10, 1962, when she was referred to our clinic. Our positive findings were these: the sedimentation rate was 82 mm in one hour; blood smear showed moderate rouleau of the red blood cells and toxic neutrophils; LE clot test showed free-hematoxylin bodies and rosettes but no classic LE cells; serum albumin value was 2.56 Grams per 100 ml, gamma-globulin value was 1.79 Grams per 100 ml; and sulfobromophthalein-dye retention was 18 per cent in 1 hour.

There was a history of previous exposures to paint, and during the interim that the patient had been home with her illness, she had continued to paint in the house. When she was dismissed, I discussed the entire problem of exposure to petrochemical agents with her and her husband and recommended that their house be completely cleared of paints, solvents, brush cleaners, and all other volatile agents. We advised her to take 5 milligrams of prednisone every 8 hours under her doctor's direction. We urged her to spend 20 hours a day in bed, with bathroom and dining room privileges being her only physical activities until she remained afebrile. On this regimen she progressively improved symptomatically and objectively. An April 22, she returned to this clinic and stated that she felt "wonderful." The daily temperature chart she brought with her showed no fever since Feb. 26. Unhappily, however, her weight had increased from 148 to 177 pounds.

The laboratory reported that hemoglobin was 14.5 Grams; 5,000,000 red blood cells per cubic millimeter; sedimentation rate of 13 mm in one hour; and sulfobromophthalein-dye retention of 6 per cent. The leukocyte and differential counts and blood smear were normal; the LE clot test remained about as before, with no classic LE cells being seen; and the results of serum electrophoresis were now normal. She was dismissed to her home to begin reducing the dose of steroid under her doctor's care. This reduction was accomplished, and she has remained well since, on continued protection.

Comment and Conclusions

With these sketches of two case histories, I trust that I have been able to impart some of my belief in, and enthusiasm for, the ecologic approach to the investigation and management of mesenchymal dyscrasias. Similar observations could have been presented with systemic lupus erythematosus; hemolytic and thrombocytopenic states; lymphoproliferative diseases such as leukemia and lymphomata; aplastic anemia, and others.

In addition to the petrochemical agents, other well-accepted causative or precipitating agents include: ionizing radiation, bacterial toxins, solar radiation, and emotions, as well as trauma or fatigue of the body's structural parts. Of the chemical agents involved, benzol is probably most important and best accepted as an etiologic agent, a particularly significant fact when it is realized that benzol is ubiquitous in nature and probably contaminates, or is a functional component of, many petrochemical products.

Many of the patients afflicted with these major mesenchymal diseases also have a history of vasomotor rhinitis and other so-called allergies, while there commonly is a familial or a personal history, or both, of other mesenchymal dyscrasias suggestive of the existence of an inherent genetic susceptibility. Intermittent exposure to these agents, as experienced by the "hobbiest," the "do-it-yourselfer," and the itinerant or seasonal workman, seems an important mechanism in the production of these morbid pathologic states since the professional, regularly employed workmen, such as painters, machinists, and petroleum handlers, make up a comparatively smaller proportion of my case histories.

Histories of exacerbations and remissions of disease activity usually reveal that exacerba-

tion is related to reexposure, whereas remission has followed environmental change of altered or eliminated exposure.

If these observations are germane, it follows that a logical and basic approach to treatment of the mesenchymal dyscrasias is providing such patients with environmental protection in conjunction with accepted medical therapy. These observations would also indicate that, among other mechanisms, there is probably a loss of some "feed back" control that normally would cause the stimulated tissue to return to a resting phase when the stimulus has been withdrawn. This is particularly true with the lymphoproliferative states as lymphoma, chronic lymphocytic leukemia, myeloma, certain splenomegalies, and hypertrophy of other antibody-forming tissues. If this is true, it is time that we become reoriented and quash the premature and hopeless terms "malignant lymphoma," "cancer of the blood," "fatal collagen disease," and other depressing sensational headliners. To me, every lymphoma has to prove itself "malignant" and irreversible before I will accept it as such. This is all quite in contrast to today's attitude toward diagnostic procedures and intensive radiation of abnormalities which still may be only reactive and not an irreversible proliferative stage warranting the term "malignant."

If all of the foregoing observations have any validity, it is obvious that the ecologic approach to diagnosis and treatment requires serious reconsideration, with reorientation of both academic and pragmatic medical practice. In a broad sense, it would seem that we, as a people, with all of our bright and shiny treasures, are well overdue for an environmental cleanup.

Mayo Clinic

School Buses Can Be Unsafe

Seats in school buses were reported by researchers today to be "grossly inadequate" for protecting the children passengers from injury and death in a collision. Seats most commonly encountered in school buses, a report from the University of California at Los Angeles said, have backs that are so low that they can cause serious injury when the bus is struck, whether from the rear or head-on.

"The greatest single contribution to school bus passenger collision safety is the high strength, high back safety seat," the report said. Such a seat was described as having a well-padded back, 28 or more inches high, along with well-padded arm rests and a harness or lap belt. The report continued: "School districts usually insist on the least expensive, most durable seats available. However, considering that school buses are used more than a decade, a higher initial investment that provides greatly improved safety and comfort is money well spent."

"During 1965, some 3,700 children were injured in school bus accidents, an increase of 75 per cent over 1960," the report said. The report tells us that in moderately severe collisions a well-designed safety seat would protect passengers from sustaining more than minor injuries.

The bus study was carried out by Derwyn M. Severy, Harrison M. Brink, and Jack D. Baird of UCLA's Institute of Transportation and Traffic Engineering. For their project, the researchers conducted three experimental collisions involving school buses with dummies representing the children passengers and the driver.

The atomic age has been rapidly coming into the clinical laboratory. Here is its latest manifestation.

Atomic Absorption Spectroscopy

A Versatile New Laboratory Tool

Harry H. Stumpf, M.D./Montclair

A recent newcomer in the mushrooming field of clinical laboratory instrumentation, atomic absorption spectroscopy, is becoming the method of choice for the precise and swift measurement of metals, semi-metals, and other elements in biologic samples, particularly in blood and urine. The method is highly specific and has been particularly useful in analyzing for calcium, magnesium, iron, lead, arsenic, zinc, beryllium, copper, and mercury. Other metals that may be detected in parts-per-million to parts-per-billion quantities are antimony, bismuth, cadmium, chromium, cobalt, gold, lithium, manganese, nickel, platinum, silver, thallium, selenium, tin, sodium, and potassium, as well as a number of metals less often encountered in clinical situations.

Atomic absorption spectroscopy resembles flame photometry in which metals are excited in a flame and their characteristic emission wave lengths measured, as with the widely used flame technic for determining sodium and potassium. However, even metals most adaptable to flame analysis emit energy from only a small fraction of the atoms present in the flame; the rest remain in the "ground" or unexcited state. In that state, they are capable of *absorbing* energy of the same wave lengths the excited atoms emit. The instruments used in atomic absorption provide energy, of the wave length absorbed by the element to be tested for, by a source lamp whose emitting cathode is made of that element. This energy is passed *through* a flame (usually acetylene) in which the sample is vaporized and then through a grating monochromator where the desired wave length is isolated from adjacent elemental emission lines. The intensity of the energy of this wave length *remaining* after passage through the flame is compared with that originally emitted from the source, thus providing a direct measure of concentration of the analyzed element in the flame and, therefore, in the original sample.

Further information pertaining to the principles of atomic absorption spectroscopy may be found in the original article by Walsh[1] and recent reviews by Willis[2] and Zettner.[3]

In the author's own experience gained in running a busy pathology laboratory in a 380 bed community hospital, the method is especially suitable for rapid, accurate serum calcium,[4] magnesium, iron, and iron binding determinations.[5] Routine measurement of serum sodium and potassium levels is best continued on the simpler, less expensive flame photometer, inasmuch as these substances are usually present in sufficient quantity to permit clinically sufficient accurate results. We have the Perkin-Elmer model 303, the "Cadillac" of their line. But we suggest that anyone interested in a new unit would do well to investigate even newer, simpler, less expensive models, particularly if tests are to be for only a limited number of elements. Several of the latest versions on the market also include the desirable read-out feature at no extra cost. This appreciably facilitates the final calculation of the results.

Urine testing is particularly easy as usually no specimen preparation is needed. However, the test for mercury is not sufficiently sensitive to pick up subclinical poisoning without tedious, careful concentration of the urine specimen. We have had considerable difficulty performing satisfactory blood lead tests. The test for serum magnesium is much simpler and more accurate than any wet-chemistry method. However, there is little demand for this test despite the fact that this metal must play an important role in many metabolic pathways.

Summary

Here is a new, simple, precise method, particularly suited for trace element analysis; for fast, accurate serum copper, magnesium, iron, iron binding, and calcium levels; and readily measures many substances of toxiocologic interest.

Bibliography

1. Walsh, A.: *Spectrochim. Acta,* 7:108 (February 1955)

2. Willis, J. B.: *Methods Biochm. Anal.,* 1:67 (January 1963)

3. Zettner, A.: *Advances in Clinical Chemistry,* 7:1 (July 1964)

4. Zettner, A. and Seligson, D.: *Clinical Chemistry,* 10:869 (September 1964)

5. Zettner, A., Sylvia, S., and Capacho Delgado, L.: *American Journal of Clinical Pathology,* 48:533 (May 1966)

The Mountainside Hospital

Background Of The Drug Addict

There may not be as much difference as had been thought between the backgrounds of drug addicts and non-addicted delinquents. The same conditions of poverty, slums, and broken homes seem to produce both kinds of people.

A 12-year study of 100 New York narcotic addicts shows few differences in the backgrounds of Negro, Puerto Rican, and white addicts. They all had the same problems which seemed to lead to addiction: broken homes, lack of a "father figure" to give guidance, and a difference in the two generations' cultural backgrounds. The last seemed to be the most important in producing an addict. Whether Negro or Puerto Rican, a high proportion of the addicts' families had come from some other culture to New York's urban environment. This difference between the southern United States or Caribbean background of the parents and the environment in which the addict grew up seemed to be particularly troublesome as the child neared adulthood. "At least in part, addiction appears to stem from a lack of adequate identification with the adult role due to events occurring in childhood," the report said.

This 12-year follow-up of 100 New York addicts admitted to the United States Public Health Service Hospital, Lexington, Kentucky, suggests that most addicts "have been deprived, not only . . . by minority group membership and slum residence, but also by physical loss of parents and having been born into a culture different from the one in which their parents lived."

These addicts' delinquency often preceded drug use. Their often inadequate school and job performance occurred despite adequate or superior intelligence. Although addicts do differ from other delinquents in some ways, the study suggested that urban drug addiction may be best understood by studying general group behavior, not by setting addicts apart as a special social group.

Vaillant, G. E., M.D.: *Archives of General Psychiatry, December 1966.*

In Dr. Weimann's hands, oxymetazoline proved to be an effective pediatric nasal decongestant in 38 out of 40 children treated.

A Topical Nasal Decongestant For Children

M. L. Weimann, M.D./Haddon Heights

Allergic and infectious rhinitis present special problems in children. The younger the child, the more such congestion interferes with his well-being. He cannot clear his nose of drainage as an adult can. His nasal passages are small, and the child has more difficulty than the adult with a similar illness. Feeding, sleep, rest, and appetite are disrupted, the doctor must rule out diseases to which rhinitis may be secondary. He must prevent the complications of respiratory infection to which children are prone. And he faces problems relative to specific relief of nasal congestion.

Since feeding and sleep are important in avoiding complications, topical nasal decongestants can be of especial value. However, it should be noted that some of these preparations are irritating and a few are even habit-forming. With proper care and adequate supervision, nasal decongestants are useful in pediatrics. The hope is to find one that will produce decongestion without irritation or side effects. Thus several preparations had been tried with varying degrees of success and failure. A newer one, oxymetazoline hydrochloride (Afrin®),* recently came to my attention and is the subject of the present report.

This compound is a highly effective vasoconstrictive nasal decongestant for adults. It is now prepared in pediatric form. Laboratory studies indicate a good decongestive action at dilutions of 1 to 4,000, the dilution of the pediatric solution. Moreover, its duration of activity is sufficiently prolonged so that dosages need not be frequent. Oxymetazoline is a sympathomimetic decongestant. Yet it is not associated with the side effects usually seen in the older drugs of this type. Also, it seems to be more potent than other imidazoline derivatives. The pediatric solution of oxymetazoline differs from the adult form only in that its dilution is twice that of the adult solution.

Method

Forty children were selected from our office practice for treatment with oxymetazoline hydrochloride. Ages ranged from three months to ten years. There were fourteen under two years old; fifteen were two and a half to five years old. Eleven were five and a half to ten years old. Of the 40 in the group, 21 were boys.

Diagnosis was upper respiratory infection for 29 of the children. Seven had allergic rhinitis. Two children had allergic nasal symptoms and infection combined. The remaining two had rhinitis believed to be caused by foreign bodies.†

Dosage of oxymetazoline was varied according to severity of symptoms. There were 28 children who were given three drops in each nostril three times daily. Most of the others were treated less often. Concurrent medications were given when the child's condition indicated the need for antibiotics, antihistamines,

* Product of Schering Laboratories, Bloomfield, New Jersey.

† The object was removed from the nose in one case. No object was found in the other patient's nose despite meticulous otolaryngologic examination.

or other preparations. Thirteen children were not given any medication other than oxymetazoline hydrochloride.

Speed of decongestion and duration of relief were evaluated and graded as satisfactory or unsatisfactory. Mothers reported effects of treatment, and observations were made on return visits when return was indicated.

Results

Shrinking effects on the turbinates were long. In most cases the mothers reported that decongestive effects lasted from five to eight hours. A few children were relieved of symptoms for longer periods.

Of the results graded as unsatisfactory, all but two indicated fair degrees of relief. These two poor results were in a seven-year-old boy with allergy and an eight-month-old boy with an upper respiratory infection, neither responded to the treatment.

When a child was given concurrent medication, this was usually an antibiotic, sulfonamide, and/or antihistamine preparation. Among the thirteen children who were given oxymetazoline alone, eleven (85 per cent) obtained satisfactory results. In the group taking oxymetazoline in combination with other medications, 68 per cent had satisfactory relief. The usual reason for conjunctive medication was the presence of infection secondary to the cold. Nine of the children had otitis media. Four others had complications like bronchitis, conjunctivitis, or tonsillitis. Despite these, in the group with upper respiratory infection, and the persistent allergic manifestations in other children, 34 of the 40 children experienced excellent or good results; four had fair relief, and two failed to obtain marked relief. Of the forty, 27 patients were treated for a week or less, and 7 were treated during a second week. Only 6 patients required longer treatment, and 3 of these were continued on reduced doses as needed.

Degree and speed of relief are no more important than the absence of side effects. There were no such instances, nor was there any sign of habituation, rebound congestion, or irritation of nasal mucosa in any of the children.

Summary

1. A new topical nasal decongestant, oxymetazoline, for pediatric use was evaluated in 40 children ranging in age from three months to ten years.

2. Of the 40 children, all but two were effectively treated with oxymetazoline. Nasal congestion whether due to allergy, infection, or other cause was relieved for long periods—five to eight hours or more. As a result, fewer administrations were required and the possibility of side effects was reduced. Even in the more persistent and severe cases where more frequent administration was required, oxymetazoline did not cause side effects.

3. In our experience, this new pediatric preparation seems to be more effective than xylometazoline, tetrahydrozolidine, and phenylephrine hydrocholoride. Additional investigation of its value as a topical nasal decongestant in pediatrics seems worthwhile.

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Lead lines in the bone are found to be unrelated to excessive proline in the urine, in this survey.

Hyperprolinuria And Lead Intoxication*

Theodore Kushnick, M.D., Robert M. Bilenker, A.B., and Mohammed Sadaty, M.D./Jersey City

Aminoaciduria has been noted[1] to occur in children with severe acute lead poisoning. This is believed to represent renal tubular injury with heavy metal intoxication. Chisolm[1] has amply demonstrated generalized hyperaminoaciduria without hyperaminoacidemia in patients with acute lead intoxication, and correlated these findings with the severity of the clinical illness. In general, patients with moderate to marked hyperaminoaciduria clinically tended to have mild to severe lead encephalopathy. No correlation was found between the concentration of lead in blood, coproporphyrin output in the urine, lead excretion in the urine under the influence of Edathamil calcium, and aminoaciduria. Interestingly, all patients with hyperaminoaciduria did not excrete proline; nor have there been any reports of proline excretion correlated with specific aspects of lead intoxication.

During a recent survey, we noted that some of the patients who had roentgenographic evidence of "lead lines" in the bones were excreting proline in addition to the other aminoacids in their urine. The purpose of subsequent investigation was to determine if there was any relationship between the findings of hyperprolinuria and "lead lines" in the bones in patients with lead intoxication.

Materials and Methods

Sixteen patients were admitted to the Newark City Hospital during the summer of 1966 with a diagnosis of lead poisoning. They were investigated for hyperaminoaciduria in addition to the usual tests for lead intoxication. The filter paper chromatography screening technic (as described by Efron,[2] *et al.*) was utilized with ninhydrin and isatin staining. Roentgenograms of the long bones were interpreted by Dr. C. Richard Weinberg, Director of the hospital's Radiology Department, and two members of the Pediatric Department.

Results

The salient clinical and laboratory findings are summarized in the table. There were nine patients with hyperaminoaciduria and hyperprolinuria. Only five of these had definite "lead lines" in their bones; two had questionable "lead lines" and two had no roentgenographic findings of lead intoxication. Five additional patients demonstrated "lead lines" but four of these patients had no hyperaminoaciduria nor hyperprolinuria. One patient exhibited only hyperaminoaciduria. Two other patients with lead intoxication were free of "lead lines" in their bones and only one of these demonstrated increased urinary aminoacids without hyperprolinuria.

* This work is from the Department of Pediatrics, New Jersey College of Medicine and Dentistry, in Jersey City and from the Newark, New Jersey, City Hospital. Dr. Kushnick is Associate Professor of Pediatrics, New Jersey College of Medicine and Dentistry, and Attending Pediatrician at the Newark City Hospital. Mr. Bilenker is a senior medical student at the New Jersey College of Medicine and Dentistry. Dr. Sadaty is an instructor in pediatrics, New Jersey College of Medicine and also at Newark City Hospital, Newark, New Jersey.

Comment

It has been apparent that the level of hyperaminoaciduria correlates fairly well with the severity of the clinical symptomatology in acute lead intoxication. However, there were no reports with regard to the correlation of hyperprolinuria with one of the aspects of lead poisoning – namely "lead lines" in the bones. Urinary hydroxyproline has been used as an index of collagen turnover in bone, since hydroxyproline occurs almost exclusively in collagen.[3] A decrease in hydroxyproline excretion has been noted in scorbutic guinea pigs and was attributed to a failure in hydroxylation of proline.[3] In lead poisoning, the "lead lines" are considered to represent growth retardation lines due to the combination of several factors. These include inhibition of osteoclasts, inhibition of osteoblastic building activity, and phosphate diuresis due to renal tubular disease.[4] With these considerations, it seemed possible that one mechanism whereby proline might appear in the urine would be its reduced utilization for the formation of hydroxyproline which could then be used for collagen formation. In addition, the renal tubular poisoning by lead could contribute to the proline excretion in the urine. Chisolm[1] has noted, however, that the concentrations of the aminoacids in the serum of patients with lead poisoning were normal or somewhat reduced in amounts as determined by semi-quantitative chromatography.

The data presented in the table indicate no relationship between the presence of "lead lines" in the bones of patients with lead intoxication and their excretion of proline as well as other aminoacids in the urine. Not all patients with lead poisoning and hyperaminoaciduria excrete proline and this variance is still unexplained.

Summary

Sixteen patients with lead intoxication were investigated to determine if there was any correlation between excretion of excessive proline in the urine and "lead lines" in the bones. No such correlation could be demonstrated.

Patient	Sex	Age (years)	Serum-Lead Level mgm %	Convulsions	Urine A.A.	Urine Proline	X-ray Lead lines
1.	F	3	.06	0	+	+	+
2.	F	3	.15	0	+	+	+
3.	F	3	.10	+	+	+	+
4.	M	3	.06	0	+	+	+
5.	M	4	.06	0	+	+	+
6.	F	3½	.06	0	+	+	?
7.	M	11	.06	+	+	+	?
8.	M	2	.06	0	+	+	0
9.	M	7	.09	+	+	+	0
10.	M	1½	.16	0	0	0	+
11.	M	2	.06	0	0	0	+
12.	M	2	.09	0	0	0	+
13.	M	2½	.21	0	0	0	+
14.	F	2	.08	0	+	0	+
15.	M	4	.08	0	+	0	0
16.	F	5	.07	0	0	0	0

+ = Positive; O = Negative; ? = Questionable

Bibliography

1. Chisolm, J. J., Jr. and Leahy, N. B.: *Journal of Pediatrics,* 60:1 (January 1962)

2. Efron, M. L., Young, D., Moser, H. W., and MacCready, R. A.: *New England Journal of Medicine,* 270: 1378 (1964)

3. Dull, A. A. and Henneman, P. H.: *New England Journal of Medicine,* 268:132 (1963)

4. Park, E. A.: *Pediatrics,* 33:815 (1964; No. 5, Part II)

24 Baldwin Avenue

American Medical Association Convention

June 18 to 22, 1967 Atlantic City

Here is a successfully treated case of Addison's Disease in an eleven-year old boy. Addison's Disease is extremely rare in a patient so young.

Addison's Disease In Childhood

Anthony P. DeSpirito, M.D., Joseph C. Bogdan, M.D., and Gustodio Castor, M.D./Neptune City

Addison's Disease, or chronic hypoadrenalism, was first described by Thomas Addison in 1855. While it is now known that it is not an uncommon disease in adults, it is infrequently seen in children under eleven years of age. Jaudon[1] could find only 62 proved cases in children in his review of the literature from 1856 through 1946; of these, only thirteen were under eleven years of age. Its present-day overall incidence is estimated[5] at eleven cases per 100,000 hospital admissions, most of these occur between the second and fourth decade of life. The actual pediatric incidence is unknown.

The classical picture of Addison's Disease is frequently absent. We here present a classical case of Addison's Disease in an eleven-year old child.

An eleven-year old boy was admitted to Fitkin Memorial Hospital in August 1965 because of persistent vomiting and weight loss for a period of one month. Several weeks prior to admission, the child had repeated bouts of vomiting. A local physician prescribed antispasmodics, which led to only slight improvement. The vomiting persisted and one week prior to admission became associated with dizziness and weakness. A weight loss of nine pounds occured during this period.

The past history was essentially negative, except for the usual childhood diseases and a tonsillectomy done several years before admission. There was no history of tuberculosis or any other chronic disease in the family. He was a well developed, apathetic child with diffuse bronze tanning of the skin. Temperature was normal but pulse was 100 per minute, and regular respirations were 30 per minute, not labored. Blood pressure was 110/70 in both arms. He had hypoactive abdominal peristalsis, a slightly dried tongue and buccal mucosa. Accompanying the bronzed-tanned skin, were multiple, deeply pigmented nevi. The gingiva appeared normal, as did the rest of the physical examination. The electrocardiogram showed some evidence of hyperpotassemia.

The patient had three bouts of vomiting the next morning, followed by marked lethargy and fatigue. Spinal tap showed: sugar—58 mg. per cent; protein—18 mg. per cent with one white cell per cubic millimeter. Electrolytes showed a sodium of 122 m.eq. Potassium was 5.0 m.eq.; and chloride was 85 m.eq. Carbon dioxide was 21 m.eq. A gastrointestinal x-ray series, an intravenous pyelogram, and chest and skull x-rays were all reported as negative.

The patient was treated with intravenous normal and hypertonic saline. Within 24 hours dramatic improvement occured. The child then became alert and smiling. On the seventh day of hospitalization, the intravenous was discontinued and he was placed on 3 Grams of salt daily; 20 milligrams of hydrocortisone, twice daily by mouth; and 1 milligram of DOCA daily, intramuscularly. The electrocardiogram was now interpreted as normal. Prior to the start of steroid therapy, two consecutive 24-hour urines were obtained for 17 ketosteroids and 17 ketogenic steroids levels after 50 units ACTH stimulation. A milligram of fluorohydrocortisone was given prior to the ACTH stimulation. Urine studies were completed at the Bio-Science Laboratories in Los Angeles, California and they reported:

1st 24-hour Urine specimen:
17 ketosteroids was 1.5 milligrams/24 hours. (Normal for age — 1 to 5 milligrams/24 hours)
17 ketogenic steroids was 3.3 milligrams/24 hours. (Normal for age — 10 milligrams/24 hours)

2nd 24-hour Urine specimen:
17 ketosteroids was 0.9 milligrams/24 hours
17 ketogenic steroids was 0.9 milligrams/24 hours

As a result of these studies, the diagnosis of Addison's Disease was, we felt, confirmed. On the tenth hospital day, the sodium was 143 m.eq., potassium was 4.6 m.eq., and chloride was 103 m.eq.; BUN was 21 mg. per cent; calcium was 10.1 mg. per cent; and phosphorous was 3.3 mg. per cent; PBI was 6 per cent micrograms. The patient was discharged and is now being followed by his physician. He is in good condition and being maintained on salts and steroids.

Prior to 1940, tuberculosis was the most common etiologic agent in Addison's Disease. In Jaudon's review,[1] almost all of his cases were secondary to tuberculosis. Surgical or x-

ray ablation of the pituitary,[9] as well as cessation of long-term steroid therapy, are not uncommon causes of Hypoadrenalism today, especially in the adult.[5] Bilateral tumor formation, amyloid disease, and histoplasmosis, are also causes. It is probable that our patient had none of these, but actually fell into the idiopathic, or auto-immune, type of Addison's Disease.

Recent studies[2] of children with Addison's Disease, in which other evidence of an autoimmune disorder, such as Hashimoto's Disease[3] and Hypoparathyroidism,[4] have been described, and some studies[8] have actually isolated circulating antibodies.

Before any of the clinical manifestations of Addison's Disease are exhibited, about 90 per cent of the adrenal cortex must be destroyed.[5] The classic clinical symptoms of Addison's Disease are as follows:

1. Weakness and fatigue	95 to 100%
2. Weight loss	90 to 95%
3. Increased pigmentation	90 to 95%
4. Anorexia, nausea, and vomiting	85%
5. Diarrhea or constipation	20 to 25%
6. Salt craving	19%
7. Muscle pain	10%

Our patient had the weakness, fatigue, weight loss, vomiting for one month prior to admission.

Hypotension has been mentioned[10] as occurring rather frequently in adults with Addison's Disease, In children[11] it is rare[12] and less important. Our patient did not have evidence of hypotension. Hypoglycemia may be an initial symptom, and occasionally can be so severe that it might be confused with hyperinsulinism. It is more commonly found in adults than children.[17] The hypoglycemia in Addison's Disease is not as severe as that found with hyperinsulinism, but both of these diseases may produce muscle weakness, hypotension, and vomiting. Thus they are readily confused.[18]

The marked increase in pigmentation shown by our patient is best likened to a persistent suntan. He also had darkly pigmented moles on his trunk, as well as increased pigmentation over the elbows and knees. Najar[6] described a four-year old girl whose sole manifestation of Addison's Disease was "tan-like" pigmentation for six months prior to her admission. The gingiva and buccal mucosa are usually pigmented, but this was not found in our case. It is interesting to note that when the patient is on adequate therapy,[6] the pigmentation usually diminishes.[6,7]

The severe electrolyte disturbances that accompany adrenal crises, include marked hyponatremia, hyperkalemia, hypochloremia, and acidosis. Most patients with these electrolyte pictures will respond to sodium chloride therapy. The electrolyte abnormalities are due to failure of salt reabsorption because of little circulating steroid. Blood urea nitrogen is frequently elevated initially, but returns to normal during therapy. This elevation is believed to be secondary to dehydration.

Several tests have been described to clarify the diagnosis. One of these, the water loading test, was not done on our patient, since the clinical and laboratory studies were highly indicative of Addison's Disease, and the water-loading test is not conclusive. Furthermore, while doing the test, there is the danger of putting the patient into hypervolemia, with water intoxication.[6] This test is based on the impaired excretion of excess water by the kidney. It is good as a screening test if one is suspicious of Addison's Disease. In this patient, however, the danger of the test was great in view of the presumptive history and laboratory findings of Addison's Disease.

The most dependable and sensitive method[8] of determining the function of the adrenal cortex, now available, is the effect ACTH stimulation has on the urinary excretion of 17 ketosteroids and 17 ketogenic steroids.[8,9] A base-line 24-hour urine is obtained, and then 25 to 50 units of ACTH are given for 2 or 3 days; and 24-hour urines are obtained for the steroid studies. With primary impairment of adrenal function, little or no rise in steroid excretion will follow.[11] The table shows the lack of rise of the steroid values after two days of ACTH stimulation. The fall in value of the 17 ketosteroids from a low normal of 1.5 milli-

grams to a definite low of 0.9 milligrams is highly suggestive of complete exhaustion of the adrenal.

Results of two day ACTH stimulation* on urine excretion of 17 ketosteroids and 17 ketogenic steroids as compared to the normal. All values are in milligrams per 24 hours.

	17 Ketosteroids		*17 Ketogenic steroids*	
	Patient	*Normal*	*Patient*	*Normal*
DAY #0 (pre-ACTH)	1.5	1 to 5	3.3	10
DAY #2 (ACTH)	0.9	20 to 40	0.9	15 to 40

This test is not innocuous. The ACTH stimulation may be enough to exhaust a hypofunctioning adrenal and put the patient into adrenal crisis. It may also produce an anaphylactic reaction as a foreign protein. These complications are greatly lessened by using one or two milligrams of fluorohydrocortisone along with the ACTH stimulation.[14]

A basal eosinophil count done after ACTH stimulation, (the Thorn test) has fallen into disrepute recently because of its lack of specificity. It may serve to give negative information.[13]

The insulin tolerance test is dangerous and should not be used. As few as one to two units of insulin can plunge a patient with Addison's Diseases into hypoglycemia.

Treatment

The treatment of Addison's Disease has improved greatly since the availability of steroids. In adrenal crisis, the replacement of salt, in the form of 5 per cent dextrose in normal saline, at the rate of 75 milliliters/kg. per day, as well as the use of intravenous hydrocortisone (in a dose of 50 to 100 milligrams or even higher) have given excellent results. In the maintenance of the chronic state, the dose of steroid has to be tailored to the individual. Cortisone, in a dose ranging from 25 to 37 milligrams per day, has been advocated. DOCA is the hormone of choice in the initial regulation of these patients, because of its salt retaining effect. The dosage ranges from 0.3 to 3 milligrams a day, given by the intra-muscular route. After proper dosage is established, the subcutaneous pellets of DOCA may be given. Their effect may last up to one year. Fluorohydrocortisone may also be used for maintenance. This has an advantage in its salt-retaining property. It can be given by mouth, in a dosage of from 0.1 to 0.2 milligrams per day. Supplementary salt for maintenance may be given, depending upon the patient. Many different combinations of these agents have been used with good results.[13,17]

Our patient responded well to a combination of salt, DOCA, and cortisone. He is maintained on a Gram or two of salt daily and cortisone. Since his discharge, the child has had no further bouts of weakness or vomiting. His skin tanning has decreased. This decrease in skin pigmentation is a common sign of adequate therapy.[6]

It is advisable to instruct your patients to carry a card stating that they are "Addisonians," listing the medications they are receiving, and what to do in case of an emergency

Prognosis

Prognosis in Addison's Disease today is excellent. Dunlop[11] states that with medications in use today these patients can lead normal lives. It should be remembered that in times of severe emotional or physical stress, in the forms of surgery and trauma, these patients must be placed on much larger doses of steroids than mere maintenance.

Summary

Addison's Disease is rare in childhood. An eleven-year old boy is presented with findings suggestive of Addison's Disease. These included nausea, vomiting, weakness, skin pigmentation, and weight-loss. Laboratory studies showed the characteristic signs of hyponatremia, and hypochloremia. The failure to respond to ACTH stimulation (measured by 24-hour urine ketosteroid excretion) was confirmatory of the diagnosis. The literature on the incidence and diagnosis of Addison's Disease was briefly reviewed. Steroids of varying combinations, with or without sodium chloride, are the treatments of choice.

A bibliographic listing of 18 citations will be found in the authors reprints.

* 50 Units of ACTH in 500 cc 5 per cent dextrose in 0.33 per cent sodium chloride over an 8-hour period daily.

2100 Corlies Avenue

In our state, the effect of two medical schools on the future of practice, as well as the future of medical education, is thoughtfully reviewed in this unusual presentation.

The Future Of Medical Education*

Clifford W. Gurney, M.D./New Brunswick

In this decade, American medical care and medical education are in a state of rapid change. An expanding population, a rising level of affluence, a changing concept of the nature of modern medical care and the right of all citizens to its benefits, and the impact of a scientific revolution on the practice of medicine are among the many reasons why unrest is common in the professional and academic communities. While serious medical problems will be encountered in future decades, the precise definition of these problems is not yet clear.

The medical educator has cause to reflect on the rapidity of change in our increasingly complex society. He sees more and more involvement and participation of the federal government in the total health sector. He senses mounting pressures upon the medical school to look outward to the community and somehow relate more positively to the practitioners of medicine. It may well come to pass that many members of the medical profession will also at some future time look to the medical school as an institution which will temper and modulate mounting pressures calling for quick over-simple solutions to complex problems.

One extremely complex problem relates to the nature of education of the future practitioners of medicine. Two recent studies are the report of the *ad hoc* Committee on Education for Family Practice of the Council on Medical Education of the American Medical Association, and the Report of the Citizens Commission on Graduate Medical Education (The Millis Report). These call for fresh examination of the format of undergraduate and graduate medical education. A dominant theme is: Is the education offered sufficient to develop a physician competent to render comprehensive health care? It is unfortunate that New Jersey does not yet have vast experience and an established tradition in public-supported medical education, for it is precisely at this time of innovation, experimentation, and change that leadership from viable medical schools is needed. Without such leadership and participation, it is not likely that we shall escape federal planning and nationwide changes. Rather there would appear to exist a very real danger that we shall fail to retain, at local and state levels, those degrees of influence and control which are in the best interests of our citizens and the practitioners of this state.

The proposals of these reports need to be examined against a background of experience in medical practice and medical education if these recommendations are to be translated into plans which offer promise of coping with the problems of delivering improved medical care to our citizens in decades ahead. As quickly as Rutgers Medical School is instructed by the state legislature to develop a four-year curriculum and the necessary support to implement such a commission is assured, I hope qualified individuals capable of designing a visionary clinical curriculum —

* Talk before MSNJ Committee on Medical Education, meeting in Trenton on March 5, 1967. Dr. Gurney is Chairman of the Department of Medicine at Rutgers Medical School.

senior, devoted physicians with long experience in both the practice of medicine and the education of future doctors—will be recruited, so that a critical clinical faculty can initiate a study of the degree to which the AMA report and the Millis report can assist us in the creation of a curriculum appropriate to the needs of New Jersey. Such a local study, although time consuming, is essential if we are to avoid the pitfalls which so frequently accompany hasty solutions to complex problems. The Millis report seems to endorse this suggestion, since it states "because educational programs properly differ from one institution to another, we recommend that each medical school faculty and each teaching hospital staff, acting as a corporate body, explicitly formulate, and periodically revise, their own educational goals and curricula."

Prior to the completion of such a study by representative members of a clinical staff which does not as yet exist in New Brunswick, it is premature to offer specific proposals. However, some reflections from one interested party may not be totally inappropriate at this time. Leaving aside the specific definition of the "family physician," the conventional medical curriculum is probably sufficient in all respects save one for the education of a physician competent to render comprehensive medical care. The wide sampling of each and every clinical discipline does, in its totality, constitute comprehensive instruction in scientific aspects of the practice of general medicine. In discussing "the subject matter of the family practice program," the AMA Report emphasizes internal medicine, psychiatry, and behavioral sciences which are already emphasized in the two-year program at Rutgers Medical School, and surgery, pediatrics, obstetrics and gynecology, and community medicine, all of which represent areas we hope to begin to develop in the near future. One deficiency, however, arises from the lack of opportunity of many medical students to observe and participate during their undergraduate training in a program of comprehensive medical care. In preoccupation with course content and curriculum, medical educators have frequently neglected the importance to the medical student of appropriate models. The nature of the modern medical curriculum assures the medical student a working exposure to psychiatrists, internists, surgeons, pediatricians, obstetricians, and radiologists. The student is able to adopt as his own particular model any of these individual specialists. It is totally unrealistic to consider purging from the medical schools specialists in this present day of an ever increasing tendency towards specialization. It would, however, appear reasonable to offer the student the potential model of a family physician as well. If an appropriate amount of comprehensive medical care distributed by family physicians can be included in the senior year of the curriculum, the medical school will have answered the major justifiable criticism of its failure to prepare family physicians, for there is to my knowledge no conscious effort within any medical school to influence actively the students choice of career. If family physicians are given an opportunity to demonstrate for the student the rewards and excitement of family practice, the medical school will have fulfilled its obligation to society within the framework of a free choice by the future physician of his career selection.

Perhaps, however, the medical schools are not primarily involved in influencing career choices of medical students. Those of us experienced in medical education are all too well aware of the narrow limits within which we can exert any influence over todays medical student. Curious, critical, skeptical, socially conscious, sometimes idealistic, sometimes cynical, and far more rebellious than his counterpart of two decades ago, the modern medical student is not easily to be sold *any* particular program. He will absorb, test, weigh, and measure. His experience in medical school will exert only that degree of influence which it justly deserves. And it is beyond the medical school, in the community where the student of the 1970's will come face to face with the realities of medicine as he sees it practiced, that he will make his career decision.

Neither the Millis Report nor the AMA Report suggests the student is or can be prepared for family practice upon graduation from medical school. Both reports emphasized the need for extensive postgraduate education. Indeed, the Millis Report states that "the level of training should be on a par with that of other specialties. A two-year graduate program is insufficient." The complexity of our problem now begins to emerge. If graduate education for family physicians is to rival in duration that of other specialties, the program will have to be extremely attractive indeed to compete with currently established residencies. If this recommendation of the Millis Report is to be disregarded, can a shorter period of postgraduate training interest a substantial segment of medical students in our status-conscious society?

We are concerned with problems that call for much discussion, reflection, and study. Our medical schools are destined to change strikingly in the future. The community hospitals will also encounter pressures demanding change, and often these pressures will be far more pressing than those upon the medical school. To what degree, for example, will community hospitals be prepared to accept that portion of the Millis Report which states, "we recommend that the internship, as a separate and distinct portion of medical education, be abandoned, and that the internship and residency years be combined into a single period of graduate medical education called a residency and planned as a unified whole?" The changes most difficult of all to implement are those changes asked not primarily of the medical schools, but rather of the medical profession and of society itself, for, as is so cogently expressed by the AMA Report, "if young physicians are to enter and remain in family practice, even though well educated for the field, the environment must be supportive of this kind of practice. This means that there should be appropriate status and prestige, access to staff privileges at a hospital of adequate size with modern equipment and facilities, professional associates to provide intellectual stimulation and to share the patient loads and responsibilities, opportunity for continuing education at a convenient place and time, and a reasonable share of the amenities of life for the physician and his family. Conditions must be such that the family physician feels that he occupies an important place in medicine, that he has the opportunity to perform at a high level of excellence, that he can command the respect of the community and his professional colleagues, and that he and his family can live a happy and fruitful life in pleasant surroundings."

It is premature at this time to propose simple solutions to complex problems, only one of which has been considered here. It is rather a time to ask the state medical society to support the two medical schools. The Millis Report tells us that "trends now evident will grow stronger and clearer in the future: regional groupings of hospitals; collaboration of the medical center with other parts of the university; the university medical center as the center of a network that brings the resources of many disciplines, many specialists, many kinds of information, and many specialized services to the benefit of patients in its own beds, and in the beds of other hospitals in the network. These trends will continue, for the growth of knowledge must lead through specialization and fragmentation to a higher order or organization which will enhance the ability of many kinds of specialists to work together on the problems that are the reason for their existence." Only time will tell how much of this prediction is correct, and if that which is correct is also good. After all the dust has settled, however, the patient and his physician will remain. Regardless of the year, we will know "1984" has arrived when this ceases to be. Is it not true that two viable medical schools and their associated medical centers offer the medical profession in New Jersey its best hope for orderly and considered progress in these times of rapid change?

Rutgers Medical School

STATE ACTIVITIES

Address of Retiring President*

Joseph R. Jehl, M.D.

Now is the time to put off the old and on the new. In this hour my presidential year comes to its end. From my heart, I extend to Dr. Collins warm wishes for his success as your president and an earnest pledge of my support and assistance in any and all work for the good of our great Society and the people of New Jersey whom we serve.

It has been a truly great privilege to serve as the 174th president of The Medical Society of New Jersey. The duties have been many and challenging. I have consistently striven to acquit myself of my responsibilities and functions. I hope that you have been pleased.

In my annual report, I have already paid deserved tribute to my co-workers. One of the riches of the year has been the acquisition of many new friends at both state and county levels. Those friendships constitute for me the greatest treasure of the presidential experience. Because of them, I am richer than when I assumed the office, and I shall be rich as long as I live.

It is natural that, looking back over the year, many pictures and impressions should crowd my consciousness. Those that are most dominant seem to focus on three subjects: social legislation and third party relationships, you the physician, and your patient. These three are the areas of demanding concern and of paramount importance.

It is probably inconceivable that there is nothing of human devising that is so good that it cannot be improved. Certainly this is true of social systems and conditions. In our endeavor to achieve improvement we should follow the technic of reform and hold fast to the good while discarding the bad. The trouble is that some of those most ardent for change assume that all change is improvement, and tend to confuse revolution with reform. With abandon they pursue total change and are inclined impartially to destroy both the good and the bad, with wanton results that threaten people, ideals, and property.

It is the revolutionary who threatens my concept of what society should be. As a citizen, I resent his arrogant over-riding of the elements of established good which give stability and worth to our social environment and relationships.

As a physician, I am equally resentful of his brassy aggressiveness. I object when people untrained and unskilled in my art tell me how to treat the sick. Some of these people are medical graduates but have never practiced medicine, even for a day. Only the physician is qualified to practice medicine. His is the judgment that should prevail.

Social legislation and social change should go forward slowly, always guided by constructive reformers rather than by radical revolutionaries, by acknowledged experts rather than by self-anointed prophets and high priests. If we are to preserve the freedom and control of our profession, if we are to protect the effective intimacy of the doctor-patient relationship, we must be steadfast in preserving the good and rejecting the bad. We owe it to society, to our profession, and to our patients to embrace change that spells real progress and benefit, and to resist, tirelessly, those changes which can only impair not improve, destroy not build.

There are invitations on every hand to woo us as physicians and citizens to surrender personal responsibility and personal freedom and to resign ourselves to the tender mercies and protection of the state. The inducements offered us are material in nature and fleeting-

* Remarks before House of Delegates, third session, May 16, 1967.

ly temporal. We should recall the biblical characters of Esau and Jacob. We must decide on whom we are to pattern. We are being pressured to surrender our birthright, as Esau did, for a mess of pottage. We should weigh the long-lasting deprivations that will follow if we capitulate.

With each progressive intervention of government in the field of provision of health care, there is a concomitant increase in costs to the taxpaper. This is matched, step-by-step, by growing inflation. If ultimately that inflation goes far enough, the buying power of the dollar will be so reduced that everything that the individual has provided for himself in the way of security — savings, investments, insurance, and home — will be destroyed. Then our sole reliance will have to be on such subsistence and security as the state can provide. We will be wards of a resourceless state, and we will rue the decision that sacrificed our birthright as free citizens for the illusory, promised advantages of state aid and governmentally-provided security.

These are times that try men's souls. They call upon us to prove our mettle. If we fail, as physicians and citizens, to be "firm in the right as God gives us to see the right," we will be untrue to ourselves, our profession, our patients, and our country. I am confident that the men and women of medicine will be, as they long have been, true to themselves. The benefits that follow will accrue to all.

Trustees' Minutes

April 16, 1967

A regular meeting of the Board of Trustees was held on April 16, 1967. For your further information, detailed minutes are on file with the Secretary of your component society. A summary of the significant actions follows:

L. Samuel Sica, M.D. . . . Adopted the following memorial resolution and authorized a contribution, in the amount of $50, to the Medical Student Loan Fund in memory of Dr. Sica:

L. SAMUEL SICA, M.D.

1885 — 1967

Whereas, after a long life of distinguished and endearing service, L. Samuel Sica has been called to his eternal reward; and

Whereas, in the course of his professional life he won eminence as a surgeon and loving respect as a man; and

Whereas, he rendered outstanding services to organized medicine — at county, state, and national levels — through his loyalty and efficiency to the duties which he successively assumed; and

Whereas, to all who knew him of the profession and of the laity, he was an inspiring example of all the best that is implicit in the terms "gentleman" and "friend;" now therefore be it

RESOLVED, that the Board of Trustees of The Medical Society of New Jersey — recalling him affectionately as Board Member and Chairman — records profound grief at his passing; and be it further

RESOLVED, that a copy of this resolution be spread upon the minutes of the Board, and that a further copy, suitably prepared, be presented to Dr. Sica's bereaved family in token of heartfelt sympathy.

Project Hope . . . Directed that, if and when MSNJ mails to all members of the Society a letter of appeal from an official representative of HOPE, a supporting editorial run in the current issue of THE JOURNAL.

Business Personal Property Tax Replacement Program . . . Directed that a summary, prepared by legal counsel, of pertinent information relating to the Business Personal Property Tax Replacement Program be published in either THE JOURNAL or the *Membership Newsletter,* whichever can accommodate it first. (see page 277, this issue)

AMA-ERF Allocations . . . Directed that presentations of two checks, representing AMA-ERF allocations for the year to medical schools in New Jersey — one to the New Jersey College of Medicine and Dentistry for $5,816; the other to Rutgers, The State University, for $3,030, be made by the President at the opening session of the House of Delegates, and that the President of the New Jersey College of Medicine and Dentistry and the Dean of Rutgers Medical School, or their designated representatives, be invited to accept.

Committee on Medical Education . . . Approved the report of the Committee on Medi-

cal Education, including the actions of that Committee on the following recommendations of the AMA Millis Commission Report:

(a) "Because educational programs properly differ from one institution to another, we recommend that each medical school faculty and each teaching hospital staff, acting as a corporate body, explicitly formulate, and periodically revise their own educational goals and curricula. To do so would be a healthy exercise for medical educators and a fundamental step toward the solution of many of their educational problems."

The committee concurred in the basic premise of this recommendation.

(b) "First, simple rotation among several services, in the manner of the classical rotating internship — even though extending over a longer period of time—will not be sufficient. Knowledge and skill in the several areas are essential, but the teaching should stress continuing and comprehensive patient responsibility rather than the episodic handling of acute conditions in the several areas."

The committee concurred in this recommendation.

(c) "Second, some experience in the handling of emergency cases and knowledge of the specialized care required before and following surgery should be included."

The committee concurred in this recommendation.

(d) "Third, there should be taught a new body of knowledge in addition to the medical specialties that constitute the bulk of the program."

The committee concurred in this recommendation, but agreed that extensive study will be necessary to evolve the new body of knowledge suggested.

(e) "Fourth, there should be opportunities for individual variations in the graduate program."

The committee concurred in this recommendation.

(f) "We recommend that each teaching hospital organize its staff, through an educational council, a committee on graduate education, or some similar means, so as to make its programs of graduate medical education a corporate responsibility rather than the individual responsibilities of particular medical or surgical services or heads of service."

The committee concurred in the basic premise, but foresaw complications in institutions with residency programs limited to a few fields.

(g) "We recommend that the internship, as a separate and distinct portion of medical education, be abandoned, and that the internship and residency years be combined into a single period of graduate medical education called a residency and planned as a unified whole."

The committee could not approve the recommendation as submitted, because it loses sight of the tremendous educational advantages of intern training in community hospitals.

(h) "We recommend that state licensure acts and statements of certification requirements be amended to eliminate the requirement of a separate internship and to substitute therefor an appropriately described period of graduate medical education."

The committee recommended exploration of incorporating training at community hospital level as *a required* intervening step between formal education and hospital *specialty* training. (Italics indicate amendments by this Board.)

(i) "We therefore recommend that graduation from medical school be recognized as the end of general medical education, and that the specialized training begin with the start of graduate medical education."

The committee felt that further exploration of the relationship of community hospitals and teaching institutions is needed in addition to further consideration of the community hospitals' staffing problems.

(j) "We recommend that hospitals experiment with several forms of basic residency training, and that the specialty boards and residency review committees encourage experimentation by interpreting liberally those statements in the residency requirements that now inhibit this form of educational organization."

The committee approved the foregoing recommendation.

(k) "We recommend that the specialty boards, in amending their regulations concerning eligibility for examination for certification, not increase the required length of residency training to compensate for dropping the requirement of a separate internship. This can be done by retaining present wording concerning length of residency training and deleting statements concerning internship training."

The committee took no action on the foregoing, in view of its disapproval of the proposed abandonment of the internship.

(l) "We recommend that programs of graduate medical education be approved by the residency review committees — only if they cover the entire span from the first year of graduate medical education through completion of the residency."

The committee approved this recommendation.

The Board approved the foregoing recommendation of the Committee, with the proviso that the word "specialty" be substituted for "graduate" in the original report recommendation.

(m) "We recommend that programs of graduate medical education not be approved unless the teaching staff, the related services, and the other facilities are judged adequate in size and quality, and that, if these tests are met, approval be formally given to the institution rather than to the particular medical or surgical service most directly involved."

The committee viewed the recommendation as commendable but considered that it requires further careful scrutiny and study.

(n) "We recommend that staff members of university medical centers and other teaching hospitals explore the possibility of an intensive effort to study the problems of graduate medical education and, where such development appears feasible, they seek to arrange for the development of improved materials and technics that can be widely used in graduate medical education."

The committee approved the foregoing recommendation.

(o) "We therefore recommend that a newly created Commission on Graduate Medical Education be established specifically for the purpose of planning, coordinating, and periodically reviewing standards for graduate medical education and procedures for reviewing and approving the institutions in which that education is offered."

The committee questioned whether such centralized control would be beneficial and held the opinion that the end envisioned could be taken care of by organizations already in existence.

Council on Medical Services . . . Approved the report of the Council on Medical Services, including the following recommendations:

1. P.L. 89-749

That, in furtherance of MSNJ's already-expressed desire to participate in all aspects of health care planning and services in New Jersey, the Chairman of the Council on Medical Services be authorized to arrange a special meeting with the Commissioner of Health and such representatives of his department — or other state departments — as he suggests and selected members of the Council, for the purpose of discussing the present status and the proposed implementation of P.L. 89-749 in New Jersey.

2. New Jersey Hospital Association *Reporter* —in response to an article in the November 7, 1966 issue.

(a) That MSNJ reaffirm its unequivocal opposition to any involuntary assessment of fees by the hospital upon the physician under any guise.

(b) That MSNJ reaffirm its policy position that it is the responsibility of the pharmacy committee in each hospital to insure that no drug substitution will be made without the consent of the physician in charge in each specific instance; and further, to assure prescribing physicians that the quality of any drug substitute suggested is satisfactory.

3. Special Advisory Committee

That an advisory group of specialty society consultants to the Council on Medical Services be established, and that each specialty society be invited to appoint one member of its society as its official consultant-representative.

4. Title XIX

That the Board of Trustees authorize the Council to arrange a conference with the Commissioner of Institutions and Agencies and selected members of his staff with selected representation from the Council on Medical Services, for the purpose of the department's open discussion of the Society's objectives and plans for Title XIX as it will be implemented in New Jersey.

Medical-Surgical Plan . . . Disapproved the suggestion that only physician-nominees to the MSP Board be submitted to MSNJ and recommended strongly, instead, that *all* nominees for membership on the MSP Board continue to be submitted to the MSNJ House of Delegates for approval, as required under current MSP bylaws in conformity with the precedent historically established and uninterruptedly maintained.

Board of Medical Examiners . . . Agreed to add the name of Anthony J. Balsamo, M.D. of Bayonne, to the list of three names submitted to the Governor under date of April 10, for consideration for the place on the State Board of Medical Examiners made vacant by the death of Vincent P. Butler, M.D.

"Aesculapius Award" . . . Approved the action of the Executive Committee in ascertaining that authorization was given for the Society to participate in the "Aesculapius Award" for the best scientific exhibit, to be presented at the 1967 annual meeting.

Training Of Ambulance Squads

The Board of Trustees of The Medical Society of New Jersey has recommended that the county medical societies take responsibility for the training of the personnel of First Aid Squads, Rescue Squads, and ambulance attendants. In implementation of that, our Burlington County Medical Society organized such a training program in April 1967, and this was found to be an effective and successful project both in actual operating and pedagogic terms as well as in public relations. This report, from the executive secretary of the Burlington County Medical Society is presented as a guide to other county societies interested in a similar enterprise.

Two hundred first-aiders spent two balmy spring days eating up the words of wisdom presented by members of the Burlington County Medical Society. They also ate a considerable number of buns, Danish pastry and sandwiches; and absorbed gallons of coffee and soft drinks for the two lunches supplied by the Moorestown Canteen. The squads were the guests of the Society for the two days and seemed to enjoy every minute. Between meals the squad members were fed large doses of emergency procedures by fifteen members of the Burlington County Medical Society, two physicians from Camden County Medical Society, and four other speakers. Dr. Richard Betts was the course coordinator, and he reports that all participants were excellent. They were cooperative and enthusiastic, and have expressed their willingness to repeat their performance.

The course was based on the assumption that all attending had taken the advanced course in American Red Cross First Aid. Thus, the technics presented were "post graduate" and of a professional level far above that which is usually taught to the first aid and rescue personnel. Instruction included care of the unconscious patient, cardiopulmonary resuscitation, emergency childbirth, patient triage, care of the multiple-injured victim, treatment of major body trauma of the face, head, neck, spine, chest, abdomen, and upper and lower extremities. Detailed instructions were given on first aid of neck injuries incurred in diving accidents, care of the mentally disturbed, the convulsing patient, the obnoxious drunk, and treatment of medical emergencies in the child and adult.

Lieutenant Howard G. Nixon of the County Detective's office spoke on communications. Assemblyman Barry T. Parker, Jr., gave an interesting resume of the law as it applies to ambulance drivers.

Other than for the "Rushton Brothers," Mr. Parker and Lieutenant Nixon, all of the professional talent was supplied by the Burlington County Medical Society. The speakers were pleased by the many sharp and intelligent questions asked by the squad members. One speaker turned to the audience and said: "Are you squad members getting anything out of all this?". The audience responded with cheers, whistles, shouts, and clappings which shook the rafters of the old barracks building. The day after the course ended. Dr. Betts got a letter from one of the squads saying, "The methods we learned on Saturday and Sunday enabled us to save a life on Sunday night." This, in itself, should be sufficient reward to the physicians for their expenditure of time.

Certificates of Proficiency, signed by officers of the society, were presented to each squad member. And the Burlington County Medical Society here records thanks to Anthony T. Greski, Director of the County Board of Freeholders, who welcomed the squad members, and to Mr. Edmond Maguire, the County Civil Defense Disaster Control Coordinator. The location was excellent, the projection facilities and the acoustics superb.

This is the first effort on such a large scale of organized medicine in New Jersey to upgrade the training of the First Aid and Emergency Squads. Certainly no one is able to give the training on this professional level but the physician himself, and it seems only proper that the County Medical Society should be the leader in the field.

The Next Step In Heart-Pacing Hardware

The Newark Beth Israel Hospital Institute has developed a new cardiac pacemaker electrode which will reduce the power drain on the implanted electric batteries by up to 80 per cent. Thus the implanted pacemaker batteries will keep delivering sufficient electric current to the limit of their natural "shelf life" which is about five years. The device can be made much smaller since only one miniature battery will be needed. Present pacemaker devices contain five batteries which usually wear out in the relatively short time of 2 to 2½ years necessitating their removal and replacement by surgery. This is a breakthrough in the application of the biologically energized pacemaker which requires no batteries at all. Up to now, the use of biologic energy was limited in its capacity to deliver sufficient electric power for this life-sustaining device.

Technically, the new electrode eliminates two of the major sources of power waste which have been inherent in cardiac pacemakers: polarization, an unwanted chemical-physical reaction that wastes electric current; and overgrowth of the body's connective tissue around the tip of the electrode which impairs the free passage of current.

The device, as developed at Newark Beth Israel Hospital Institute, consists of a tiny plastic box containing platinum foil bathed in saliner. At one end, the cardiac catheter wire is connected to the platinum foil; at the other end, the electrically charged fluid is put into contact with the inside wall of the heart through a small hole in the plastic box. The narrow column of fluid acts as an electric conductor which emits the necessary electric jolts that stimulate the heart. While the electric density along the wide surface of the platinum foil is too low to provoke a wasteful polarization effect, the "funnel action" of the fluid escaping through the small hole concentrates all this energy at one point where there is no corrosive metal. Thus, the power drain on the batteries is no more than the useful power that is transmitted to the heart. This "funnel effect" was first discovered in 1960 by Dr. Alexander Mauro, at Rockefeller University. Then Dr. Victor Parsonnet, vascular surgeon and chief of surgery, and his research team immediately began working on modifications of this principle. In collaboration with Professor Gerhart Lewin, of The Plasma Research Laboratories at Princeton, and Dr. George H. Myers, of the Department of Electrical Engineering at New York University, the Beth Israel group set out to develop practical devices they could use in conjunction with their cardiac pacemakers. The overall project was supported in part by a grant from the National Heart Institute, and by the John A. Hartford Foundation.

The development program, directed by Drs. I. Richard Zucker, an authority in cardiodynamics, and Victor Parsonnet, finally resulted in several designs of "Differential Current Density" (DCD) electrodes. One of the serendipities observed in animal tests is their apparent invulnerability to connective tissue formation by the body. The presently used exposed metallic electrodes lose a good deal of their conductivity when they become enveloped by this scar tissue. But the small open hole of the DCD electrode is constantly flushed by body fluids which minimizes the formation of a connective tissue barrier. Its outside "sleeve" component, however, tends to become a target for tissue adhesion which advantageously creates a holding bond that keeps the electrode in place and actually protects it. Laboratory and animal trials proved so successful that, at last, nothing stood in the way of the electrodes' first use in human patients.

Several of the new DCD cardiac catheters already have been manufactured by the Institute's own facilities. According to Drs. Zucker and Parsonnet, the next suitable patient whose heart requires a pacing device for survival, will be able to benefit from the advantages of the new device. Within the Beth Israel "Pacemaker Club," numbering more than 150 card-and-battery carrying members, he will be the first to carry his battery "full term."

1967 Golden Merit Award

Following are the remarks of retiring President Joseph R. Jehl on the occasion of the Eleventh Annual Bestowal of the Golden Merit Award at the 201st Annual Meeting of The Medical Society of New Jersey on May 13.

Many have been the pleasures and honors that I have enjoyed as President of The Medical Society of New Jersey, but the pleasure and honor that are now mine exceed in true gladness and genuine heart's satisfaction anything that I have thus far known.

It is my privilege, in the name of The Medical Society of New Jersey — of the past as well as of the present — and, in the name of the profession of medicine and your fellowmen — both of whom you have served long and well — to present to you, the Society's Golden Merit Award, as a well-merited tribute of love and of praise.

Frequently, today, it is said that the physician is held in less esteem than once he was. This contention is in substance a subtle tribute to you men and women of medicine who, going before, set such high standards of devotion and service that they are difficult to sustain. You have worked so well and achieved so much in terms of patient response that your successors find it challengingly difficult to vie with you.

Medicine of today, as an art and as a science, is the heir of all the teachers and practitioners of preceding generations. You, my dear colleagues, received much from your predecessors, and the practitioners of today have had through you that much which you received, plus all that you have in addition helped to contribute.

For fifty years of splendid service, for fifty years of dedication to high ideals and demanding duties, for fifty years of giving of self that others might be enriched, The Medical Society of New Jersey acclaims you today. It thanks you in the name of mankind for the gifts of your giving, it extols you for the good that you have accomplished, and it congratulates you on the success that you have won and the example that you have given.

Golden have been the years of your life for half a century. May many golden years of life remain for you, golden years filled with the sense of work of noble note well done, with the consciousness of the deserved gratefulness of colleagues and patients alike, and with the awareness of the smile of God on all that you do.

RECIPIENTS OF THE GOLDEN MERIT AWARD

BERGEN COUNTY

Russell F. Maddren, M.D., 680 Summit Avenue, Hackensack
Michael Sarla, M.D., 55 Hudson Street, Hackensack

CAMDEN COUNTY

*Irvin Elmer Deibert, M.D., Pen Key Club, Islamorada, Florida
Oram Roscoe Kline, M.D., 514 Cooper Street, Camden

CUMBERLAND COUNTY

Samuel Thomas Day, M.D., 51 Main Street, Port Norris

ESSEX COUNTY

Gustave A. Braun, M.D., 59F Buckingham Dr., Leisure Village, Lakewood
William Daniel Crecca, M.D., 111 Park Avenue, Newark
Samuel Morris Goldstein, M.D., 645 Elizabeth Avenue, Newark
A. Julius Gordon, M.D., 140 Roseville Avenue, Newark
William Henry Hauck, M.D., 644 Stuyvesant Avenue, Irvington
Raymond Thornton Potter, M.D., Llewellyn Park, West Orange
Richard Henry Staehle, M.D., 366 South Orange Avenue, South Orange
Richard Damascus Swain, M.D., 211 Roseville Avenue, Newark
Leopold Szerlip, M.D., 9100 West Bay Harbor Dr., Miami Beach, Florida
William R. Tilton, M.D., 21 Kensington Road, Madison
Frederick Herbert von Hofe, M.D., 144 South Harrison St., East Orange
Francis Charles Weber, M.D., 286 Mt. Prospect Avenue, Newark
Earl Leroy Wood, M.D., 225 Ballantine Parkway, Newark
Joseph Harrison Wyatt, M.D., 135 Clinton Avenue, Newark

HUDSON COUNTY

Salvatore Caridi, M.D., 431 59th Street, West New York
Jacob Hagop Hekimian, M.D., 2314 Palisade Avenue, Weehawken
William Jay Snyder, M.D., 6050 Kennedy Boulevard, West New York

* Awarded posthumously

MIDDLESEX COUNTY

Joseph Dolin, M.D., 2053 Woodbridge Avenue, Edison
Miles Meyer Hamburg, M.D., 60 North Sixth Avenue, Highland Park
Henry Haywood, M.D., 49 Paterson Street, New Brunswick

MONMOUTH COUNTY

Madeline Kahrs-Dreyfors, M.D., 265 S.W. 72nd Avenue, Miami, Florida

MORRIS COUNTY

Franklin Wilson Rice, M.D., 50 Macculloch Avenue, Morristown

OCEAN COUNTY

Julius Sidney Heller, M.D., Monmouth Road, Plumsted Township
Jacob Mark Schwarsbram, M.D., 328 Second Street, Lakewood
Joseph O. Smigel, M.D., 500 Beacon Avenue, Beachwood

PASSAIC COUNTY

Louis Joseph Bohl, M.D., 320 Broadway, Paterson
Allen Wilson MacGregor, M.D., 17 Powder Horn Road, Hohokus
Leonard M. Matthews, M.D., 50 Allwood Place, Clifton

SOMERSET COUNTY

Abram Levy, M.D., 106 East Union Avenue, Bound Brook

UNION COUNTY

Lawrence George Beisler, M.D., 1528 North Broad Street, Hillside
*Thomas Haight Leggett, M.D., 69 Leland Avenue, Plainfield
John L. Sly, M.D., 382 Springfield Avenue, Summit
Abraham Strom, M.D., 410 West Seventh Street, Plainfield
Leo J. Ward, M.D., 230 West Jersey Street, Elizabeth

WARREN COUNTY

George Homer Bloom, M.D., 674 Hillcrest Boulevard, Phillipsburg

Business Personal Property Tax Replacement Program

(The following was prepared by Robert M. Backes, Legal Counsel to MSNJ)

Commencing with 1968 and thereafter, tangible personal property used in business in New Jersey will be exempt from *local* (municipal) taxation. The tax on the same instead will be by the State of New Jersey, with local taxing districts receiving replacement revenues from the State Treasury. New Jersey will impose four new or increased business taxes to raise such replacement revenues. The new taxes payable in 1968 are based upon 1967 business income, receipts, and property holdings. Of these, the first two (listed below) apply to the practicing physician, except for those physicians practicing within a corporate structure, in which case the third tax listed below would also be applicable:

1. Business Personal Property Tax

As of October 1, 1967 and annually thereafter, tangible business personal property (machinery, equipment, furniture, and detachable fixtures) will be assessed. The tax rate will be approximately 65¢ per $100 of original cost (1.3% on 50% of original cost). Tax Returns will be filed on or before February 15, 1968 (and annually thereafter), with half payment due February 15, 1968, and the second half due September 15th.

2. Unincorporated Business Tax

Based on 1967 gross receipts allocated to New Jersey, individuals in business (and unincorporated businesses) must file by April 15, 1968 (and annually thereafter based on prior year's receipts) a return to include tax payment at the rate of 25¢ per $100 (¼ of 1%). There is a $5,000 exclusion which, if exceeded, is not treated as a deduction. When gross receipts exceed $5,000, but those allocable to New Jersey are less than $5,000, a return must be filed but without tax.

3. Corporation Business Tax

The existing corporate tax rate has been increased 1½% on net income allocable to New Jersey (only 1¼% of this is to be used for local personal property tax replacement). Additionally, there is a new minimum net worth tax for domestic corporations based upon the authorized capital stock.

4. Retail Gross Receipts Tax

Persons in business of retail store sales having gross receipts in excess of $125,000 must file a return on or before March 15, 1968 and annually thereafter, on the preceding year's

* Awarded posthumously

receipts. The first $150,000 of taxable receipts is exempt. The tax rate is 5¢ per $100 (1/20 of 1% of gross receipts) .

The Business Personal Property Tax and the Corporation Business Tax are administered by the Corporation Tax Bureau, 20 West Front Street, Trenton, New Jersey; telephone (609) 292-5166. The Unincorporated Business Tax is administered by the Emergency Transportation Tax Bureau, 225 West State Street, Trenton, New Jersey; telephone (609) 292-4645. All taxpayers should by now have received Business Personal Property Replacement Tax information forms, which must be completed and returned, giving information which will become the basis for the new taxes commencing in 1968.

The Library Of The Academy Of Medicine

The founding fathers of the Academy of Medicine of New Jersey insisted that the establishment and maintenance of a medical library should be a primary goal of the organization. Over the years, devotion to this goal has resulted in the present fine collection. The library currently houses close to 45,000 volumes and receives over 600 periodicals. The books and periodicals in the general collection include the most important publications on every phase of medicine. The collection is increasing daily and, at present, contains almost every publication requested.

Although the Academy is proud of its library collection, it is not satisfied with it. Plans for the immediate future include a massive binding program to preserve back issues, which become increasingly more valuable. We hope to double the periodical subscriptions and substantially increase book acquisitions.

Besides the general collection, the library also contains several special collections worthy of note. In 1959 funds were received for the Abraham Barhash Collection on neurology, psychiatry, and related subjects. This special section of the library has acquired considerable repute as an outstanding collection. In 1953, Dr. Lewis W. Brown of Newark started the Lewis Brown Collection on allergy and immunology. Dr. Brown continues to add to this comprehensive collection. The History of Medicine room contains many biographies and items of special interest to New Jersey, as well as the history one would expect. The Rare Book Room houses a priceless collection of volumes for the lover of history and antiquities.

The library is supported in many ways by the doctors of our state. Many friends donate new books or periodical subscriptions in their specialty, constantly increasing acquisitions. Physician writers are also encouraged to donate copies of their books, which are then reviewed in the Academy *Bulletin*.

Associate library memberships are open to those who do not qualify for membership in the Academy but who wish to use and support the library. In the same way, hospitals, or commercial firms who contribute $100 or more a year are named "Friends of the Library" and derive special privileges for their generosity.

The library is open from 9:00 A.M. to 5:00 P.M. on Monday, Tuesday, Thursday, and Friday; 9:00 A.M. to 9:00 P.M. on Wednesday; and 1:00 P.M. to 5:00 P.M. on Saturday. During July and August it is not open on Wednesday night or Saturday. Any member of the medical, dental, or allied professions is welcome to make use of its services. Also invited are members of the general public who have a responsible need for certain material.

PHYSICIANS SEEKING LOCATION IN NEW JERSEY

(Listed in order of receipt)

The following physicians have written to the Executive Offices of MSNJ seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physician. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly of them.

GENERAL PRACTICE—John Lifland, M.D., 733 Pine Street, Philadelphia, Pennsylvania. University of Virginia School of Medicine, 1965. Available July through September.

INTERNAL MEDICINE—Alfred M. Derrow, M.D., 555 Wisteria Way, San Rafael, California 94903. Tufts 1962. Available, July 1968.

Philip R. Fleishman, M.D., 2691 Eaton Crest Drive, Eatontown, New Jersey 07724. Downstate Medical Center 1961. Associate or partnership. Available July 1967.

Robert M. Amick, M.D., 58 Francis Street, Boston, Massachusetts 02115. Yale University School of Medicine. Board eligible. Group or institution. Subspecialty — cancer chemotherapy. Available July 1967.

Laurence Novick, M.D., 510 East 85th Street, New York, New York 10028. Chicago Medical School, 1961. Subspecialty — hematology. Partnership or group. Available July 1967.

Richard J. Bukosky, M.D., 11816 West Bluemound Road, Wauwatosa, Wisconsin 53226. Marquette 1960. Board eligible. Subspecialty — allergy. Available July 1967.

C. Robert Ruppenthal, M.D., 2607 Hampshire Road, Cleveland, Ohio 44106. University of Pennsylvania 1960. Board Eligible. Subspecialty — hematology. Associate or group. Available July 1967.

Ronald G. MacClary, M.D., 6 Granada Terrace, Middletown, Rhode Island 02840. University of Michigan 1958. Board eligible. Group. Available August 1967.

NEUROLOGY — Michael H. Schuman, M.D. 249th General Hospital, APO 96267, San Francisco, California. New York University School of Medicine 1961. Private or group. Board eligible. Available August 1967.

OBSTETRICS AND GYNECOLOGY—Robert E. Fabricant, M.D., 5954 Wainwright Drive, Wainwright Heights, Fort Hood, Texas 76540. New York Medical College 1960. Partner or Associate. Available July 1967.

OPHTHALMOLOGY—Paul Todtfeld, M.D., 13461 Wetner Park, Fort Campbell, Kentucky, 42223. State University of New York (Downstate) 1961. Board qualified. Available July 1967.

PATHOLOGY—Melvin Stahl, M.D., 27 Bradford Road, Natick, Massachusetts 01760. Boston University School of Medicine 1956. Association (or solo) in community hospital. Available November 1967.

PSYCHIATRY — Stephen J. Barrett, M.D., 593 Magellan Avenue, San Francisco, California. Columbia College of Physicians and Surgeons 1957. Available summer 1967.

Gilbert N. Ferris, M.D., Quarters "D", U.S. Naval Hospital, Key West, Florida 33040. Seton Hall College of Medicine 1961. Board eligible. Salaried position. Available July 1967.

SURGERY—David M. Hirsch, Jr., M.D., 267 East Burlington Street, Riverside, Illinois 60546. University of Chicago 1959. Board eligible. General and thoracic.

Martin Seidenstein, M.D., Box 1696, 7th Field Hospital, APO San Francisco 96594. State University of New York 1959. Partnership or group. Available July 1967.

James D. Cozzarelli, M.D., 849A Birch Circle, Fort Devens, Massachusetts. George Washington University 1959. Partnership or group. Available July 1967.

Robert E. Lazarus, M.D., 1441 N.W. 19th Street, Miami, Florida 33125. Northwestern University 1962. Board eligible. Associate leading to partnership. Available June 1967.

Henry B. Leonardi, M.D., Turnpike Road, Norwich, Vermont 05055. Hahnemann Medical College, 1958. Board eligible. Available June 1967.

Lawrence B. Langsam, M.D., 1707 Terry Avenue, Bellevue, Nebraska 68005. Downstate Medical Center 1960. Board certified. Group or partnership. Available August 1967.

A. Allen Badri, M.D., 6315 North Rosebury, Clayton, Missouri 63105. University of Teheran Medical School, 1959. General and Plastic. Available July, 1967.

OBITUARIES

Dr. William J. Albrecht

One of New Jersey's senior practitioners, Dr. William J. Albrecht, died on April 13, 1967. He had been born in 1884, during the Presidential term of Chester Arthur, and he lived through the transition from gas lights to neon, from primitive steam ships to trans-oceanic jets. In 1912, he received his M.D. at the medical school of the University of Louisville. He then did postgraduate work at the University of Pennsylvania and the University of Michigan — a rare activity in those days. Dr. Albrecht was a general practitioner with a special interest in cardiology, and was, indeed, the first cardiologist at the Somerset Hospital. He was a laureate of our Golden Merit Award in 1962.

Dr. M. J. N. Ashhurst

Dr. Martius Ashhurst was one of South Jersey's best known general practitioners. His baccalaureate degree came from Temple in 1926 and his M.D. from Howard in 1930. From Washington he came to Philadelphia where he held staff positions at Mercy-Douglas Hospital for a decade. He then came to Moorestown in Burlington County and Lawnside in Camden County, opening offices in both municipalities. He was the only GP in Lawnside. Dr. Ashhurst was affiliated with the Burlington County Hospital. Born in 1898,

he died at his home on April 21, 1967 after a brief illness.

Dr. F. Clyde Bowers*

F. Clyde Bowers, the 167th President of The Medical Society of New Jersey died, after a brief illness, on April 22, 1967. Born in Phillipsburg in 1908, he received his baccalaureate degree at Lafayette in 1929 and his M.D. at Temple in 1933. An internist, he was identified with both the St. Clare's Hospital in Denville and the Memorial in Morristown. He served for many years as president and chief of staff at the latter hospital. Dr. Bowers had an active career of service to the members of our Society, and his wise counsel will be missed.

Dr. John H. Caputi

At the untimely age of 41, Dr. John H. Caputi, a Camden surgeon, died on April 29, 1967. Born in Merchantville in 1925, he received his baccalaureate degree at Princeton in 1945 and his M.D. at the University of Pennsylvania in 1949. He then interned at the Cooper Hospital in Camden, completed a surgical residency, received Fellowship in the American College of Surgeons, and became a Board diplomate in surgery. He was on the surgical staff at Cooper Hospital at the time of his death.

Dr. Charles Hyman

In 1964, the Atlantic County Medical Society named Dr. Charles Hyman the "Physician of the Year." He had been president of the Atlantic County Medical Society back in 1946, but had maintained his interest in that component society without flagging since he first joined it in 1928. Dr. Hyman, born in 1903. He was an internist, a consultant in that specialty at both county hospitals at Northfield, and chief of the Department of Medicine at the Atlantic City Hospital. Dr. Hyman received his M.D. at Jefferson in 1926. He was an FCCP, and was considered as the doctor who had work hardest to bring the AMA to Atlantic City every few years. And suddenly on April 3, 1967, Dr. Hyman died — at the age of 64.

Dr. Harry W. Ingling

One of the senior members of The Medical Society of New Jersey, Dr. Harry W. Ingling, died on April 7, 1967. Dr. Ingling was born in 1877 when Rutherford B. Hayes was President of the United States. He received his M.D. at Columbia University College of Physicians and Surgeons in 1899. Dr. Ingling was born in Freehold; and to Freehold he returned at the turn of the century to enter into a private practice career that was to last 60 years. He was affiliated with the Riverview Hospital in Red Bank and was one of the charter staff members of the Monmouth Memorial Hospital. In the early decades of the century, he was active in committe work for our Monmouth County Component Society. Dr. Ingling was the laureate of one of our Golden Merit awards in 1957.

Dr. V. Earl Johnson

On March 27, 1967, death came to V. Earl Johnson, one of south Jersey's best known practitioners. Born in 1897, he received his M.D. at Jefferson in 1920. He was an early diplomate of the American Board of Surgery, an FACS, and a former president of the Atlantic County Medical Society. Dr. Johnson was, for many years, chief of surgery at the Atlantic City Hospital. He was senior surgical consultant to the Children's Seashore House, and at one time he was president of the medical staff at both the Shore Memorial Hospital and the Atlantic City Hospital.

Dr. John Strenski

At the untimely age of 54, one of South Jersey's most effective family doctors, Dr. John Strenski died on April 10, 1967 at the Zurbrugg Memorial Hospital. A 1942 alumnus of Hahnemann Medical School in Philadelphia, Dr. Strenski served his internship at the West Jersey Hospital in Camden. He then moved to Riverside and has been serving the people of that area for a quarter of a century. Dr. Strenski was on the staff of the Burlington County Memorial Hospital in Mount Holly.

* See page 248 this issue for editorial comment on Dr. Bowers' passing.

Dr. Samuel Lawrence Winn

Dr. Samuel Lawrence Winn died on March 10, 1967 at the age of 69. Death occurred in his car as he was driving home from Florida. A 1922 graduate of the Medical School of the University of Pennsylvania, he was prominent in medical, civic, and athletic affairs in the Atlantic County area. Dr. Winn interned at the General Hospital in Lancaster in 1922-23, and then did graduate work through 1924, coming to Atlantic City in 1925. Here he made his home and here he established his office. He was the team physician to the Atlantic City Hospital for many years. During World War II he saw active service with the Army Medical Corps. Dr. Winn was on the medical staff of the Atlantic City Hospital.

LETTER TO THE JOURNAL

Not Overloaded With Meprobamate

Dear Doctor Davidson:

We have read with interest the referenced editorial which appeared on page 543 of the December, 1966 issue of your journal. However, we are concerned about the presentation of the case of the physician-pilot who, at autopsy, had meprobamate present in both blood and urine.

The reference for the editorial was Report AM 66-25, Federal Aviation Agency, entitled "Physician Flight Accidents" and issued September, 1966. We note that the only case mentioned in this report which resembles the particular one commented upon in your editorial and described above, is that titled "Case J."

We would like to direct your attention to this case report in some detail. The report states that the phenobarbital level in the blood of the physician-pilot was 3.54 mg. %. According to McBay (*New Eng. J. Med. 274*:1257, 1966), the fatal level of phenobarbital, when used alone, is greater than 5 mg. %. Thus, the level of phenobarbital in this patient is higher than the normal therapeutic level and is approaching the lethal level. However, your editorial has failed to even mention that such high levels of phenobarbital were present. Furthermore, the fact that the physician-pilot had a confirmed history of drug addiction and the fact that a syringe was found on the body and numerous narcotics were present in the aircraft was not stated.

More importantly, perhaps, is the phraseology used in connection with meprobamate. In the editorial you stated, ". . . the physician-pilot had *overloaded* himself with meprobamate. . ." (emphasis mine). According to your editorial and to the FAA report, the blood level of meprobamate in this particular case was 0.95 mg. % or 9.5 ug/ml. Since the levels of meprobamate after a single 400 mg. dose can be as high as 20 ug/ml, this level of 9.5 ug/ml is well within the therapeutic range. Thus the word "overloaded" is, we feel, both inaccurate and misleading.

We would appreciate hearing your comments to this, and we look forward to your reply at your earliest convenience.

Wallace Pharmaceuticals
R. K. Shapter, M.D.
Associate Director
Medical Services

Really, drowsiness and ataxia do sometimes occur after taking meprobamate. In the pilot, the concentration of phenobarbital in the blood was only 3.45 milligrams per cent, whereas the lethal level is well over 5. So the barbiturate alone could not have done it. He was found to have only a shade under 1 milligram per cent of meprobamate, which does suggest that he had too much of that tranquilizer. Probably the combination of the two is what caused the trouble. Wallace is the manufacturer of a pioneer brand of meprobamate (Milltown, you know) so their concern is understandable. We are sorry if we distressed the company, but our purpose in the editorial was not to criticize meprobamate, but to comment on the emotional aspects of this strange syndrome. — H.A.D.

MEETINGS OF MEDICAL INTEREST

This listing has been compiled by the Academy of Medicine of New Jersey. For additional information, including exact time of meetings, write to the society or hospital listed.

1967
June

8 **St. Mary's Hospital and Hahnemann Medical College Faculty**
St. Mary's Hospital, Passaic
"Alcoholism from a Psychiatric Standpoint"

8 **Burlington County Medical Society**
Business Meeting

8 **New Jersey College of Medicine and Dentistry**
Postgraduate Course in Psychiatry

8 **New Jersey Public Health Association; American Cancer Society, New Jersey Division; Rutgers, The State University; The Medical Society of New Jersey**
Rutgers, The State University, New Brunswick
"Are We Winning The War Against Cancer?"

9-11 **Academy of Ophthalmology and Otolaryngology of New Jersey**
Pocono Manor Inn, Pocono Manor, Pennsylvania
"Current Trends In Otolaryngology"

10 **The Academy of Medicine of New Jersey**
Monmouth Medical Center, Long Branch
"Cancer of The Oral Cavity and Pharynx"

13 **Bergen County Medical Society**

13 **Cumberland County Medical Society**

14 **Ocean County Medical Society**

14 **The Academy of Medicine of New Jersey**
Memorial Hospital, New York
"The Practical Aspects of The Management of Breast Cancer"

15 **Morris County Medical Society**

15 **New Jersey College of Medicine and Dentistry**
Postgraduate Course in Psychiatry

15 **Somerset Hospital Postgraduate Medical Education**
"Metabolic Bone Disease"

17 **American Diabetes Association**
Atlantic City

18-22 **American Medical Association**
Atlantic City

20 **Warren County Medical Society**

21 **Middlesex County Medical Society**

22 **New Jersey College of Medicine and Dentistry**
Postgraduate Course in Psychiatry

28 **Monmouth County Medical Society**

September

12 **Bergen County Medical Society**

14 **Burlington County Medical Society**
Scientific/Business

19 **Passaic County Medical Society**

21 **Somerset County Medical Society**

26 **Cape May County Medical Society**

27 **Monmouth County Medical Society**

27 **The Academy of Medicine of New Jersey**
Workshop on Cardiac Auscultation

October

3 **Hudson County Medical Society**

10 **Bergen County Medical Society**

10 Cumberland County Medical Society

11 Ocean County Medical Society

12 Burlington County Medical Society
Scientific/Business

17 Warren County Medical Society

18 Middlesex County Medical Society

18 Passaic County Medical Society

19 Morris County Medical Society

24 The Academy of Medicine of New Jersey and Rutgers Medical School
Rutgers, The State University, New Brunswick
Immunology Workshop

November

7 Hudson County Medical Society

8 Ocean County Medical Society

8 The Academy of Medicine of New Jersey and Rutgers, The State University
The Rutgers Law School, Newark
"A Colloquium on Abortion"

9 Burlington County Medical Society
Scientific/Business

14 Bergen County Medical Society

15 New Jersey State Dental Society
Semi-Annual Session

15 Middlesex County Medical Society

15 The Academy of Medicine of New Jersey
Newark City Hospital
Workshop on Cytogenetics

17 Morris County Medical Society

21 Passaic County Medical Society

22 Monmouth County Medical Society

28 Cape May County Medical Society

December

5 Hudson County Medical Society

6 The Academy of Medicine of New Jersey
"Antibiotic Induced Toxic and Hypersentivity Reactions"

12 Bergen County Medical Society

12 Cumberland County Medical Society

13 Ocean County Medical Society

14 Burlington County Medical Society
Scientific/Business

20 Middlesex County Medical Society

1968

March

13 The Academy of Medicine of New Jersey
Mountainside Hospital, Montclair
Symposium on Supraventricular Arrhythmias

BOOK REVIEWS

Disorders Of The Respiratory Tract In Children. Edwin L. Kendig, Jr., M.D., Editor. Philadelphia, 1967, Saunders. Pp. 834. Illustrated. ($26.00)

This is the first book of its kind to deal comprehensively with respiratory disorders in children. The bulk of the subject matter relates to the lung proper but conditions of the upper respiratory tract are touched upon also. The authors deal with all aspects of respiratory disorders. Included is a discussion of pulmonary physiology and pathology (however long winded and technical), neonatal respirations and congenital conditions, approach to history and physical examination, and diagnostic procedures.

The "meat" of the text is the excellent coverage of infectious diseases. The chapters on mycotic diseases are exceptionally good. The etiologic classification of the respiratory agents, and the step-wise dealing with each, presents a clear understanding of respiratory problems. A chapter dealing with the latest classification and characteristics of the picornoviruses, myxoviruses, reoviruses, and so on, illuminates a rapidly changing and complex subject. Especially interesting are chapters dealing with rare or little known disorders such as giant cell pneumonia, plasma cell pneumonia, mycoplasma pneumonia, theaurosis, microlithiasis and hemosiderosis. This type of text by necessity must be multi-authored and each of the twenty-nine authors covers his material in ample fashion. Substantial and up to date bibliographies are included.

The text technically is attractive. Illustrations are numerous and particularly notable are the ones dealing with lung segments. The many X-rays and pictures supplementing the text are for the most part good. The book is intended primarily for the pediatrician but because of its broad scope, the appeal is made to general practioners, students, and those in allied specialties.

FRANK C. VANORE, M.D.

Handbook of Pharmacology. Third Edition. Windsor C. Cutting, M.D. New York, 1966, Appleton Century Crofts. Pp. 649. Paperback. (Price Not Stated)

Written in a staccato, telegraphic style, this text tells something about almost all therapeutically useful drugs. The material is presented in brisk outline form — history, chemistry, structural formula, action, pharmacodynamics, toxicity, available preparations, and role in disease. This book has been available in two previous editions since 1962, and the current edition brings it up-to-date. To maintain the skeletal outline form, the presentations are dehydrated and dogmatic, but the material is all here and the text is useful for quick reference even if not for information in depth.

ULYSSES S. FRANK, M.D.

Modern Treatment: Complications of Diabetes, Charles R. Shuman, M.D., Editor; Pericardial Diseases, Felix M. Cortes, M.D., Editor. New York, 1967, Hoeber Medical Division, Harper & Row. Pp. 232. Illustrated. ($16.00 per year, by subscription.)

Diabetes mellitus is a systemic disease which involves all the organs of the body. Thus, a review of newer trends in diabetes must encompass practically all disciplines, medical as well as surgical. The basic question is: are the complications of diabetes real "complications," or are they the direct outcome of the diabetic state, the results of the underlying angiopathy?

Each chapter of this book is discussed competently by men highly qualified in their specialties. The theme that runs through the text is that proper control of the diabetic state is fundamental Although, in many instances, the "complications" develop before diabetes is discovered, the statistics seem to indicate a lower rate of morbidity and mortality when diabetes is well under control. Nephropathy, vascular manifestations, neuropathies, ophthalmologic, dermatologic and surgical sequelae are discussed in separate chapters.

The second half of the book is devoted to treatment of pericardial disease. This opens with an outline of chemical aspects and hemodynamics of pericardial disease. Then comes a discussion of diagnosis and treatment of the varied forms of pericarditis with particular emphasis for antibiotic and steroid therapy. Treatment of pericarditis as associated with systemic diseases, is outlined in detail. Also covered is treatment of chronic pericarditis and post-pericardiotomy syndrome as well as the management of pericarditis in children. A special chapter is devoted to the surgical treatment of pericarditis.

For anyone interested in the latest developments in the treatment of diabetes and pericarditis this invaluable guide is highly recommended.

OTTO BRANDMAN, M.D.

Ward Procedures And Techniques. Philip Cooper, M. D. New York, 1967, Appleton, Century, Crofts. Pp. 303. Illustrated (Paperback, $6.75)

The present trend toward compartmentalization of medical knowledge and skills creates the undesirable side effect of limited perspective patient care. Some physicians are unaware of total patient management. This book offers a remarkably complete precis of ward technics and procedures. The text is up-to-date, embracing even, for example, pacemaker use.

The manual is well conceived and written. Many procedures are depicted and described in appropriate detail for specific problems such as passage of long intestinal tubes. The general sections concerning resuscitation, ventilators and their use, fluid balance, and shock, are applicable to all total patient care and make good useful reading.

The volume is heavy paper bound and the format and printing is excellent. I recommend the volume for libraries both personal and reference.

ROBERT K. SPIRO, M.D.

The Pre-School Child's Learning Process. Edward B. Rosenberg, B.S. and Silas L. Warner, M.D. Chicago, 1967, Budlong Press. Pp. 102. Illustrated. ($1.50)

This is another in a series from the Budlong Press designed to help parents help their children. It may not meet the standards set by *A Doctor Talks to 5 to 8 Year Olds* or *A Doctor Talks to 9 to 12 Year Olds,* but it is still useful to the physician aiding parents of prenursery children. The text is divided into four parts: Learning Is Living; What You Learn From Your Child; What Your Child Learns From You; and Getting Ready For School. The chapter "Should My Child Learn To Read Early?" is most timely today, since both the press and educators are still trying to decide whether Johnny can or cannot read.

The value of nursery school is discussed along with chapters on discipline, types of learning, kinds of motivation, choosing toys, and the first day of school. This little book is available only through professional services. Usually the physician orders it for the parents. It admirably accomplishes its mission.

ALBERT P. ROSEN, M.D.

Congestive Heart Failure. Ralph M. Myerson, M.D. and Bernard H. Pastor, M.D. St. Louis, 1967, Mosby. Pp. 174. Illustrated ($12.85)

The mission of this book is to correlate the disturbances of congestive heart failure with the clinical picture and subsequent therapy. The authors present a lucid, well organized, concise coverage of this important concept in practical medicine. They indicate clearly which theories are inconclusive and they tell us unknown fields are still awaiting exploration. It is refreshing to read an author who is willing to admit that all is not known about the subject.

Congestive heart failure is frequently encountered in the office and hospital. This book seeks to bridge the everwidening gap between bedside medicine and laboratory research on the subject. The medical student, intern, resident in medicine, generalist, and practicing internist will all benefit from and appreciate this book. However, the physiologist, cardiologist, and medical teacher will find the discussions of cardiac physiology and pathology incomplete.

The book can be easily read in two or three short sessions. It provides a ready review as well as a clarification of some concepts that may be hazy. The style is simple and language clear, making for easy reading. The chapter on electrocardiography seems unnecessary since there are no specific EKG changes in congestive heart failure. The illustrations and graphic material are relevant, but scanty.

A discussion of congestive heart failure can be found in any text on cardiology in all degrees of complexity. This book puts it between two covers and makes it easier to handle both physically and mentally, thereby increasing its usefullness. There is always something about a short book that attracts the reader, especially on a technical subject. After all, how many of us would pick up a 2000 page volume and selectively read 150 pages on any subject? MANUEL J. ROWEN, M.D.

DOCTOR,

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DESBUTAL Gradumet

For patients who can't take plain amphetamine

Desbutal Gradumet contains 2 drugs, each in its own tablet section, combined back to back to form a single tablet. One section contains Desoxyn to suppress the appetite and lift the mood; the other contains Nembutal® (pentobarbital) to soothe the patient and counteract any excessive stimulation. The drugs are released in an effective dosage ratio throughout the day.

CONTROLLED-RELEASE

HOW IT DIFFERS FROM LONG-RELEASE

The Gradumet is made up of thousands of interconnecting channels, much like a sponge. These channels—filled with a drug—end at the outer surface of the tablet. When fluid comes in contact with the Gradumet, the drug in the outer ends of the channels dissolves. As the fluid makes its way up the channels, there is a continuous release of medication.

Since the rate of release is rigidly determined by the size and number of channels, the Gradumet is able to provide controlled-release as well as long-release. Patients get a measured amount of medication, moment by moment, throughout the day—from a single oral dose.



THIS IS A RELEASE YOU CAN COUNT ON

THE PROGRAM

WEIGHT CONTROL BOOKLET



To help your obese patients understand why they are overweight—and what they can do about it—Abbott has a booklet called "The Secret of Controlling Your Weight." *It is available to your patients only through you.*

Here is a partial list of the topics covered:

- Why you are overweight
- Rewards of weight reducing
- Balanced meals
- Helpful hints
- Hunger between meals
- Snacks
- Weekly weighings
- Exercise
- Holidays, vacations, special events
- Leanness and longevity

Each topic is covered on one page in simple and easy-to-understand language. At the back of the booklet, there is a list of 160 foods showing their caloric content.

FOOD DIARY



The Food Diary is designed to help the overweight patient follow your eating instructions. Space is provided for breakfast, lunch, supper, and even snacks. By writing everything down that's eaten each day, the patient is constantly reminded that she's trying to change her eating habits. And you are furnished with a written record of how well she's doing.

This booklet also lists the caloric content of 160 foods.

See Brief Summary on next page.

THE PRICE

ABBOTT
ANORECTIC
PROGRAM

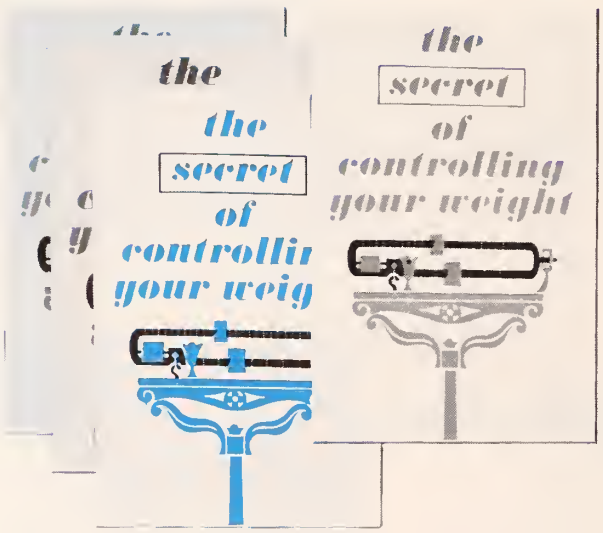
ECONOMY

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Desoxyn Gradumet and Desbutal Gradumet are so reasonably priced that patients in many cases save enough (compared to other leading long-release anoretics) to get five weeks of medication for the price of four.

FREE SUPPLIES





There are four weight control booklets, each with the same text, but with a different sample in the back of the booklet to meet your individual patient's needs. You have your choice of Desoxyn Gradumet in 10 mg. or 15 mg. strengths as well as Desbutal 10 Gradumet and Desbutal 15 Gradumet. The Food Diary is the same for all of the weight control booklets.

Your Abbott man will be happy to supply you with booklets. Just ask him.

CONTRAINDICATIONS: Methamphetamine (in Desoxyn and Desbutal) is contraindicated in patients taking a monoamine oxidase inhibitor. Do not use pentobarbital (in Desbutal) in persons hypersensitive to barbiturates.

PRECAUTIONS, SIDE EFFECTS: Observe caution in patients with hypertension, cardiovascular disease, hyperthyroidism, old age, or those sensitive to sympathomimetic drugs. Prolonged usage may lead to tolerance or psychic dependence. Careful supervision is necessary to avoid chronic intoxication and addiction.

Amphetamine side effects such as a headache, excitement, agitation, palpitation or cardiac arrhythmia usually may be controlled by reducing the dose. Paradoxically-induced depression is an indication to withdraw the drug. Pentobarbital (in Desbutal) may cause skin rash. Nervousness or excessive sedation with Desbutal is usually transient.

701069

ABBOTT

Gradumet—Long-release dose form, Abbott: U.S. Pat. No. 2,987,445.



after surgery

B and C vitamins are therapy: Therapeutic amounts of B and C in stress formula vitamins often are vital during periods of physiologic stress. STRESSCAPS capsules, designed to meet increased metabolic demands, aid in achieving a more comfortable convalescence, a more rapid recovery. After surgery, as in many stress conditions, STRESSCAPS vitamins are therapy.



Stresscaps®

Stress Formula Vitamins Lederle

FOR PROFESSIONAL RECOMMENDATION ONLY

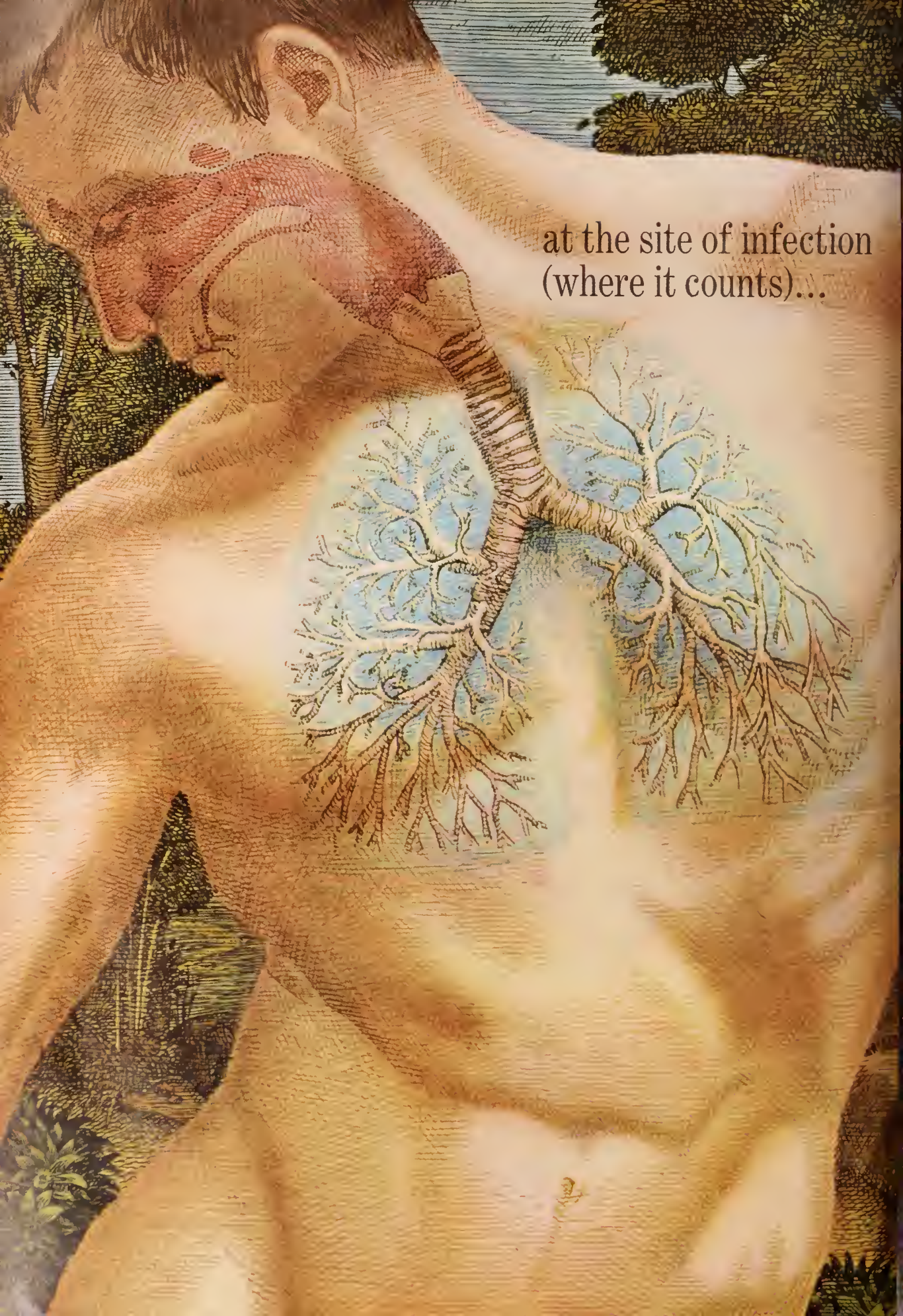
Each capsule contains:

Vitamin B_1 (Thiamine Mononitrate)	10 mg
Vitamin B_2 (Riboflavin)	10 mg
Vitamin B_6 (Pyridoxine HCl)	2 mg
Vitamin B_{12} Crystalline	4 mcgm
Vitamin C (Ascorbic Acid)	300 mg
Niacinamide	100 mg
Calcium Pantothenate	20 mg

Recommended intake: Adults, 1 capsule daily, for the treatment of vitamin deficiencies. Supplied in decorative "reminder" jars of 30 and 100; bottles of 500.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York Lederle

627-6—3613


at the site of infection
(where it counts)...

Ilosone® provides more antibacterial activity than any other oral erythromycin

Acid stable, better absorbed ... Ilosone produces faster, higher, more prolonged blood levels, even in the presence of food[1,3]

Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.[1,2] Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.[1,3]

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

700121

Ilosone®

Lilly

Erythromycin Estolate

(See next page for prescribing information.)

Ilosone®/ the most active oral form of erythromycin

Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci in culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone.

Contraindications: Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with preexisting liver disease or dysfunction.

Side-Effects: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have appeared in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly if the drug is readministered to sensitive patients, usually within forty-eight hours. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to be definitely related to use of the drug, laboratory findings were characterized by increased direct-reacting bilirubin, elevated alkaline phosphatase levels, negative or weakly positive cephalin flocculation and thymol turbidity tests, elevated serum glutamic oxalacetic transaminase levels, peripheral eosinophilia, and normal cholecystograms.

Individual idiosyncrasy seems evident since jaundice has been reported in other patients taking prolonged courses of the medication. Patients with chronic infection have been given 1 to 2 Gm. of the drug daily for periods of two to six months, and patients with rheumatic fever have taken prophylactic doses of 0.5 Gm. daily for two years without difficulty. In one group of 144 patients who received the drug daily for two years, no jaundice was noted. It was of interest that members of six of the patients' families, who were not taking the drug, had episodes of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels were determined in a group of fifty-four adults and children who took 250 mg. of Ilosone daily for an average of sixteen months for rheumatic fever prophylaxis. The results were compared with those of a similar group of forty-four patients who received penicillin. There were no cases of jaundice in either group. Elevation of SGPT and serum alkaline phosphatase levels during the course of treatment was observed in one patient treated with Ilosone and in two patients treated with penicillin. Seven other patients in the group receiving Ilosone and four others in the penicillin group showed elevations in one of the tests at some time during administration of the drugs.

Very satisfactory therapeutic results, without toxicity, were reported in 102 pediatric patients who received short-term (ten day) courses of Ilosone in the treatment of streptococcus infections. Results of liver function tests in these patients were comparable to those in a similar control group who had received penicillin.

Gastro-intestinal disturbances not associated with hepatic effects are observed in a small proportion of individuals as a result of a local stimulating effect of the medication on the alimentary tract; however, the normal intestinal gram-negative bacterial flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with the use of erythromycin, there have been occasional reports of urticarial skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally.

Ilosone Pulvules®
Ilosone Chewable Tablets
Ilosone Drops
Ilosone, 125, for Oral Suspension

For infants and for children under twenty-five pounds of body weight, the usual dosage is 5 mg. per pound every six hours; for children twenty-five to fifty pounds, 125 mg. every six hours. (Tablets Ilosone Chewable should be chewed or crushed and swallowed with water.)

For adults and for children over fifty pounds, the usual dosage of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythromycin therapy should be considered.

In the treatment of syphilis, the recommended total dosage is 20 to 30 Gm. given in divided doses for a period of ten to fifteen days. Close follow-up of the patient is necessary since erythromycin drugs have not had adequate evaluation in all stages of syphilis. Examinations of spinal fluid are recommended as part of the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four days is recommended. In the treatment of gonorrhea, patients with suspected lesion of syphilis should have a dark-field examination before receiving antibiotics, and monthly serologic tests should be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and 250 mg. (equivalent to base), in bottles of 24 and 100.

Tablets Ilosone Chewable, N.F., 125 mg. (equivalent to base) in bottles of 50.

Ilosone Drops, 5 mg. (equivalent to base) per drop, in 10-cc. size packages, with dropper calibrated at 25 and 50 mg.

Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equivalent to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size packages.

References: 1. Griffith, R. S., and Black, H. R.: Am. J. M. Sc., *247*:69, 19
2. Griffith, R. S., and Black, H. R.: Antibiotics & Chemother., *12*:398, 19
3. Hirsch, H. A., Pryles, C. V., and Finland, M.: Am. J. M. Sc., *239*:198, 1960.

Additional information available to physicians upon request.
Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly



Vacation trip....

Motion sickness?



This time it'll be different. Emetrol taken before the trip begins will usually prevent nausea and vomiting. Emetrol is effective and safe...most helpful where safety is most important. It acts locally—not systemically.

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phosphorated carbohydrate solution
emesis control

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SCIENTIFIC SHOE FITTING

A Shoe and Last for Every Foot

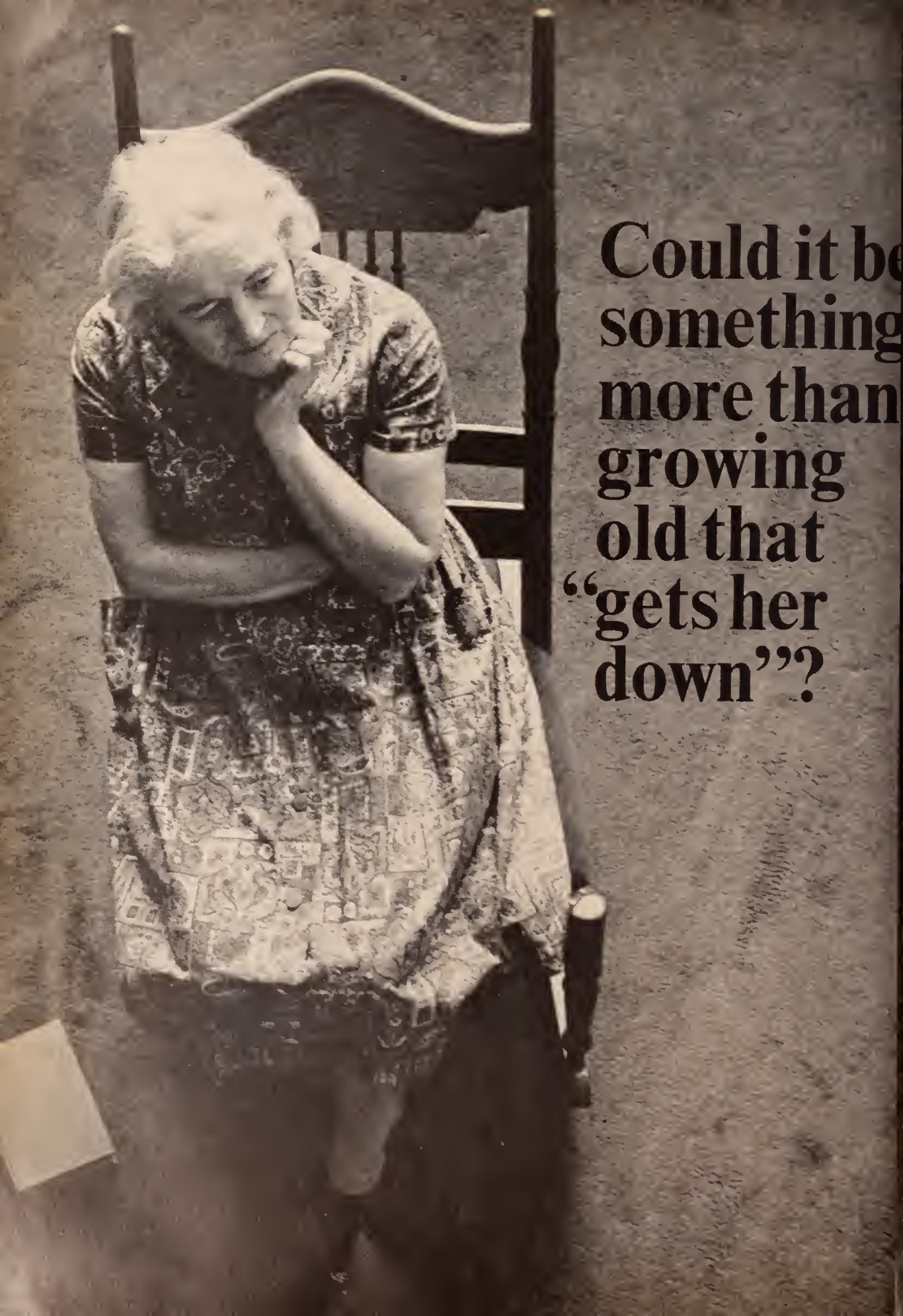
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350 MAIN STREET
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Could it be
something
more than
growing
old that
"gets her
down"?

Mild mood depression, poor appetite, little interest in the present or future. Does this picture mean that she's giving in to functional fatigue?

When functional fatigue is part of her problem, Alertonic can help counteract accompanying apathy and inertia. It helps lift mood, stimulate appetite, and establish new interest in daily life.

Pleasant-tasting Alertonic combines pipradrol hydrochloride—a gentle cerebral stimulant—with an excellent vitamin and mineral formula, in a satisfying 15% alcohol vehicle.

Especially in the aging patient, nothing fosters confidence and a sense of well-being better than your own personal warmth, understanding, and encouragement. Between visits, however, your prescription for Alertonic can help keep your patient from giving in to functional fatigue.

Adequate dosage is important: Prescribe Alertonic—one tablespoonful t.i.d., 30 minutes before meals ...tastes best chilled.

And for your patient's sake, prescribe Alertonic in the convenient, economical one-pint bottle.

Available only on prescription

Alertonic®

Each 45 cc. (3 tablespoonfuls) contains: alcohol, 15%, pipradrol hydrochloride, 2 mg.; thiamine hydrochloride (vitamin B_1) (10 MDR*), 10 mg.; riboflavin (vitamin B_2) (4 MDR), 5 mg.; pyridoxine hydrochloride (vitamin B_6), 1 mg.; niacinamide (5 MDR), 50 mg.; choline,† 100 mg.; inositol,† 100 mg.; calcium glycerophosphate, 100 mg. (supplies 2% MDR for calcium and for phosphorus) and 1 mg. each of the following: cobalt (as chloride), manganese (as sulfate), magnesium (as acetate), zinc (as acetate), and molybdenum (as ammonium molybdate).

*Multiple of adult Minimum Daily Requirement supplied.
†The need for these substances in human nutrition has not been established.,

Indications: 1. Functional fatigue such as that often associated with: a depressing experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

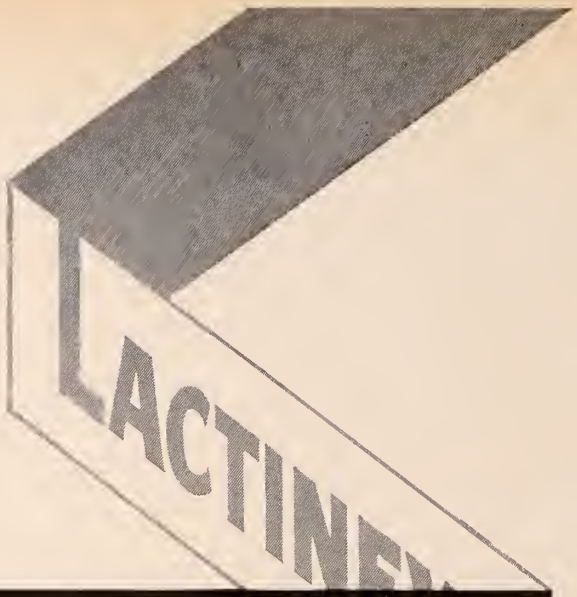
Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

Merrell

THE WM. S. MERRELL COMPANY
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

7-8378



LACTINEX®

TABLETS & GRANULES

■ **to help restore and stabilize the intestinal flora**

■ **for fever blisters and canker sores of herpetic origin**

LACTINEX contains both *Lactobacillus acidophilus* and *L. bulgaricus* in a standardized viable culture, with the naturally occurring metabolic products produced by these organisms.

First introduced to help restore the flora of the intestinal tract in infants and adults,[1, 2, 3, 4] LACTINEX has also been shown to be useful in the treatment of fever blisters and canker sores of herpetic origin.[5, 6, 7, 8]

No untoward side effects have been reported to date.

Literature on indications and dosage available on request.

References:

(1) Siver, R. H.: CMD, *21*:109, September 1954. (2) Frykman, H. H.: Minn. Med., *38*:19-27, January 1955. (3) McGivney, J.: Tex. State Jour. Med., *51*:16-18, January 1955. (4) Quehl, T. M.: Jour. of Florida Acad. Gen. Prac., *15*:15-16, October 1965. (5) Weekes, D. J.: N.Y. State Jour. Med., *58*:2672-2673, August 1958. (6) Weekes, D. J.: EENT Digest, *25*:47-59, December 1963. (7) Abbott, P. L.: Jour. Oral Surg., Anes., & Hosp. Dental Serv., 310-312, July 1961. (8) Rapoport, L. and Levine, W. I.: Oral Surg., Oral Med. & Oral Path., *20*:591-593, November 1965.

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BALTIMORE, MARYLAND 21201

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"When I couldn't even smell corned beef and cabbage,
I decided it was time for you, Doc."

Maybe he doesn't know when he's well off. But you might want to prescribe long-acting Novahistine LP anyway.

Two tablets in the morning and two in the evening will usually provide day and night relief by helping to clear congested air passages for normal, free breathing. Novahistine LP is formulated to provide continuous therapeutic effect for 8 to 12 hours. The decongestant ingredients help restore normal mucus secretion and ciliary activity—physiologic defenses against infection of the respiratory tract.

Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result. Each Novahistine LP tablet contains: phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

NOVAHISTINE® LP

DOW **PITMAN-MOORE** Division of The Dow Chemical Company, Indianapolis



when he just can't sleep

Tuinal®

One-Half Sodium Amobarbital and
One-Half Sodium Secobarbital
supplied in ¾, 1½, and 3-grain Pulvules



Tuinal helps wakeful patients fall asleep fast, stay asleep all night.

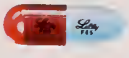
Indications: Tuinal, comprised of equal parts of Seconal® Sodium (sodium secobarbital, Lilly) and Amytal® Sodium (sodium amobarbital, Lilly), is indicated for prompt and moderately long-acting hypnosis. Not suitable for continuous daytime sedation.

Contraindications: Barbiturates should not be administered to anyone with a history of porphyria, nor should they be given in the presence of uncontrolled pain, because excitement may result.

Warning: May be habit-forming.

Precautions: Tuinal should be used cautiously in patients with decreased liver function, since prolongation of effect may occur.

Adverse Reactions: Idiosyncrasy, such as excitement, hangover, or pain, may appear. Hypersensitivity reactions occur in some patients, especially in those with asthma, urticaria, or angioneurotic edema.



Dosage: 1½ to 3 grains at bedtime.

Additional information available to physicians upon request.
Eli Lilly and Company • Indianapolis, Indiana 46206

Lilly

New drugs take exams, too.

Today, virtually every medical school in the United States cooperates with pharmaceutical manufacturers in the clinical evaluation of new and promising drugs. Just as you might find it significantly more difficult to practice medicine without the useful new compounds made available through original pharmaceutical research in the past twenty years—prescription-drug manufacturers would find it equally difficult to obtain extensive, long-term, dependable evaluations of new therapeutic agents without the close cooperation of medical staffs and clinical facilities of medical schools and teaching hospitals. Such cooperation leads toward more effective care of more patients—the common goal of medical and pharmaceutical research—toward reduction in the cost of disease, toward increase in useful longevity.

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and one remains!

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second-home retreat



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Most of these are probably among patients over 40; the overweight; relatives of diabetics, and mothers of large babies. By the time polyphagia, polyuria, polydipsia, pruritus or other overt symptoms of diabetes appear, damage may have been done that could have been minimized. DEXTROSTIX® gives you a reliable blood-glucose estimate in 60 seconds.

Why Wait?



*Based on Statistical Report, U.S. Dept. Commerce, ed. 86, and Fisher, G. F., and Vavra, H. M.: Pub. Health Rep. 80:961 (Nov.) 1965.

Note: DEXTROSTIX is not meant to replace the more precise analytical laboratory procedures such as needed in glucose tolerance testing.

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Ames

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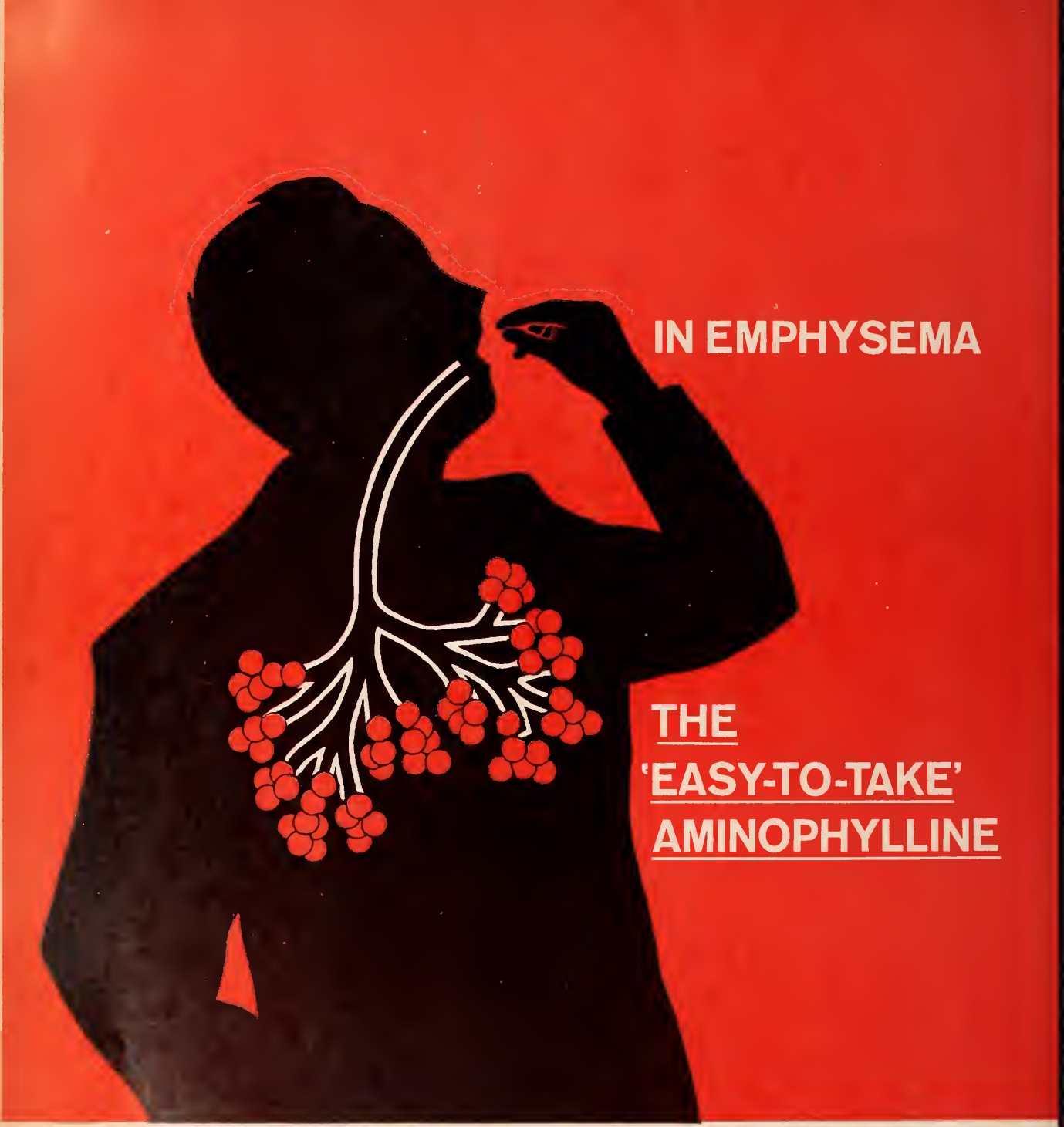
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- In Mylanta, aluminum and magnesium hydroxides are balanced to minimize the chance of constipation or laxation and still achieve rapid acid neutralization and pain relief.
- The positive action of simethicone helps relieve the painful gas symptoms which often accompany the peptic ulcer syndrome.
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Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) of liquid contains: magnesium hydroxide, 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg. **Dosage:** one or two tablets, well chewed or allowed to dissolve in the mouth, or one or two teaspoonfuls of liquid to be taken between meals and at bedtime.

The Stuart Company, Pasadena, California
Division of Atlas Chemical Industries, Inc.

Stuart



Aminophylline dura-tabs®

prolonged-medication tablets 4½ gr. (0.3 Gm.)

Precautions: Use with caution in patients with poor renal function as a decreased rate of excretion may lead to accumulation and untoward reactions. Gastric irritation may occasionally be observed in certain patients sensitive to oral aminophylline.

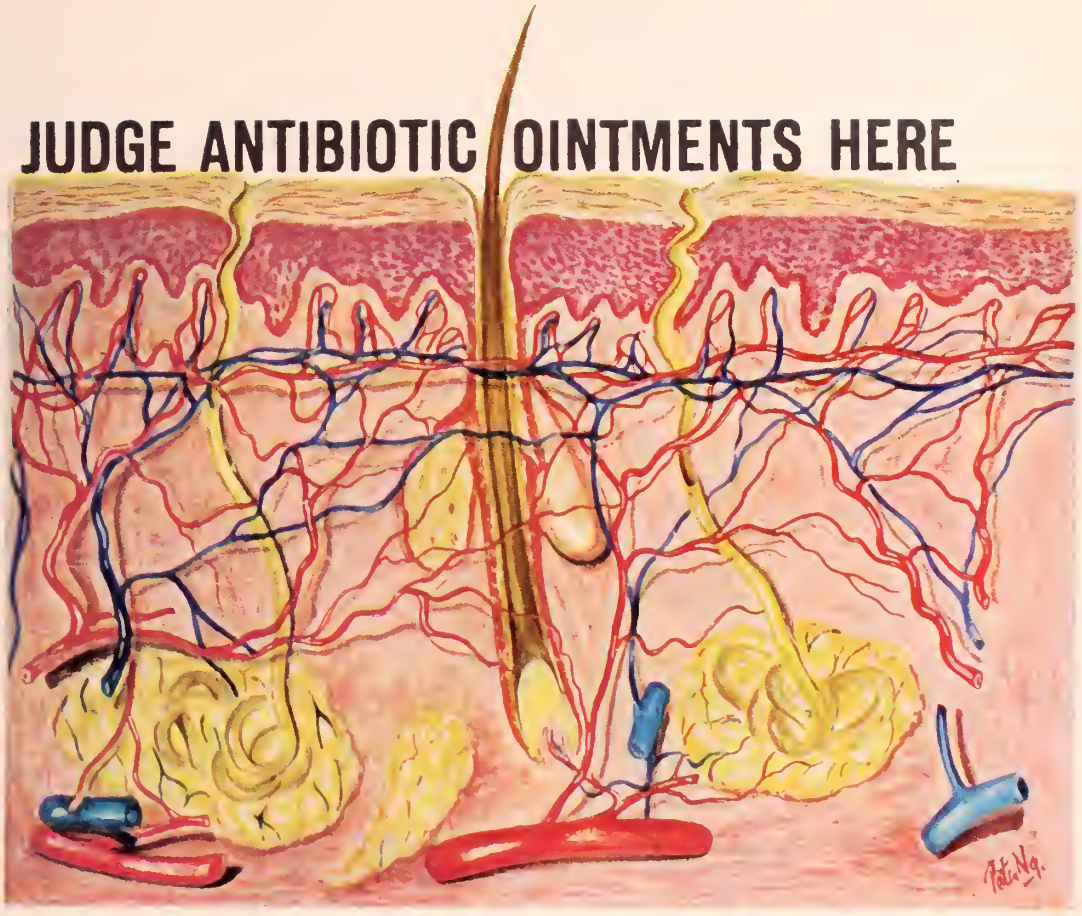
Dosage: Adults, 1 to 2 Aminophylline Dura-Tabs each 8 or 12 hours, with food.

RARELY UPSET THE STOMACH

Oral aminophylline needn't disturb the stomach—nor a good night's sleep. Patients breathe easier all day, sleep better all night, as each Aminophylline Dura-Tab dose provides effective therapeutic activity for up to 12 hours. And unlike conventional tablets, AMINOPHYLLINE DURA-TABS seldom cause gastric distress. The special Dura-Tab process allows the gradual absorption of the medication from the intestinal tract with only a small fraction of the dose released in the stomach.

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Caution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.

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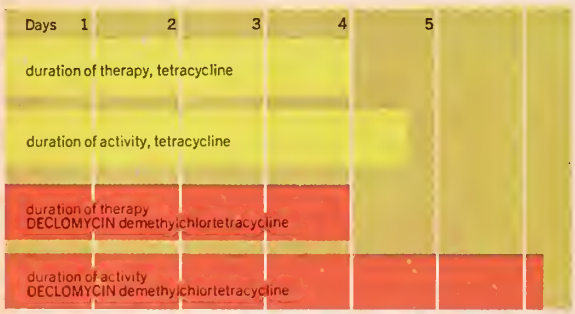
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Contraindication — History of hypersensitivity to demethylchlortetracycline.

Warning — In renal impairment, usual doses may lead to excessive systemic accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort.

Precautions and Side Effects — Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. Use of demethylchlortetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect occurs mostly during long-term use but has also been observed in short treatment courses. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment. Side reactions include glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and dermatitis. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Anaphylactoid reactions have been reported.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products.

Capsules: 150 mg; *Tablets:* film coated, 300 mg, 150 mg, and 75 mg of demethylchlortetracycline HCl.

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Contraindications: Dextro-amphetamine sulfate: in hyperexcitability and in agitated prepsychotic states. Previous allergic or idiosyncrotic reactions to meprobamate.

Precautions: Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.

Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneuratics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness.

Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneuratic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

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IMPORTANT FACTS

about

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Contraindications: Infants, patients with history of convulsive disorders or glaucoma.
Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.
Precautions: Limit dosage to smallest effective amount in elderly patients (not more than 1 mg, one or two times daily) to preclude ataxia or oversedation. Advise patients against possibly hazardous procedures until correct maintenance dosage is established; driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. Warn patients of possible combined effects with alcohol. Safe use in pregnancy not established. Observe usual precautions in impaired renal or hepatic function and in patients who may be suicidal; periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.

Side Effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances, hallucinations); changes in EEG patterns. Abrupt cessation after prolonged overdosage may produce withdrawal symptoms similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.
Dosage—Adults: Mild to moderate psychoneurotic reactions, 2 to 5 mg b.i.d. or t.i.d.; severe psychoneurotic reactions, 5 to 10 mg t.i.d. or q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; muscle spasm with cerebral palsy or athetosis, 2 to 10 mg t.i.d. or q.i.d. Geriatric patients: 1 or 2 mg/day initially, increase gradually as needed.
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